

ASYMMETRIC THREATS TO U.S. NATIONAL SECURITY
TO THE YEAR 2010

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE
Strategy

by

JOHN A. NAGL, MAJ, USA
D.Phil., Oxford University, Oxford, England 1997

Fort Leavenworth, Kansas
2001

Approved for public release; distribution is unlimited.

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

Name of Candidate: MAJ John A. Nagl

Thesis Title: Asymmetric Threats to U.S. National Security to the Year 2010

Approved by:

_____, Thesis Committee Chair
Robert D. Walz, M.A.

_____, Member
Roger J. Spiller, Ph.D.

_____, Member
LTC Jon S. Cleaves, M.M.A.S.

Accepted this 1st day of June 2001 by:

_____, Director, Graduate Degree Programs
Philip J. Brookes, Ph.D.

The opinions and conclusions expressed herein are those of the student author and do not necessarily represent the views of the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

ASYMMETRIC THREATS TO U.S. NATIONAL SECURITY TO THE YEAR 2010,
by MAJ John A. Nagl, 86 pages.

Asymmetric threats counter an adversary's strengths by focusing on its weaknesses. In the post-Cold War world asymmetric threats to U.S. national security are far more likely than they were just a decade ago. This paper considers asymmetric threats from the perspective of ends, ways, and means. It examines American and "enemy" ends, as well as several means of projecting force asymmetrically, and also suggests that symmetrical means of applying force can be asymmetric threats if they are used in certain ways. The paper concludes that perhaps the most serious threat to U.S. national security for the next ten years is the organizational culture of the Department of Defense and of its component services that leads them to prepare almost exclusively for symmetrical threats. The nation must maintain its ability to deter symmetric threats to U.S. national security, but that capability will be insufficient to protect against all of the threats that the nation is likely to face in the near future. While continuing to prepare to fight the wars the U.S. expects to fight, it must also begin devoting more resources to preparing to be hit where it does not expect to be.

TABLE OF CONTENTS

	Page
APPROVAL PAGE.....	ii
ABSTRACT.....	iii
ACKNOWLEDGMENTS.....	v
LIST OF ILLUSTRATIONS.....	vi
CHAPTER	
1. INTRODUCTION.....	1
2. METHODOLOGY.....	11
3. LITERATURE REVIEW: THINKING ABOUT THE WORLD OF 2010....	22
4. ASSYMETRIC ENDS, WAYS, AND MEANS IN 2010.....	40
5. CONCLUSION: CREATING A CONSENSUS ON CHANGE.....	58
BIBLIOGRAPHY.....	80
INITIAL DISTRIBUTION LIST.....	85

ACKNOWLEDGEMENTS

Like an Army unit, a successful thesis is the labor of many people. First thanks among many must go to Bob Walz, instructor, chair, and friend, whose support and encouragement have been invaluable. Not least among his many contributions were suggesting Dr. Roger Spiller and LTC Jon Cleaves as the other two committee members; few thesis writers can ever have been blessed with more talented or more interested supervisors. Dr. Jim Smith of the U.S. Air Force's Institute for National Security Studies (INSS) played a pivotal role by first suggesting the topic for the study, and then by providing funds to assist its research and development. Thanks are also due to the American Political Science Association and the International Studies Association, both of which allowed me to test drive early versions of the work at their annual conferences in Washington and Chicago, as did the INSS at its annual research conference in Colorado Springs in November. Last but certainly not least is my wife Susi, whose patience with me is certainly not symmetrical to mine with her; this work is dedicated to her and to our work for the year 2010 over this past year.

List of Illustrations

	Page
1. Ends, Ways, and Means.....	7
2. National Security in a World of Tiers.....	24
3. The WMD Threat in 2010.....	45

CHAPTER 1

INTRODUCTION

The American conception of national security and the art of war in the Western world have both been primarily based upon a symmetrical concept of threat. The United States has designed its national security system to deter and respond to threats that resemble itself, its manner of thinking, and its conception of warfare. In the Western world, military forces have been designed to confront other military forces on the field of battle to protect the vulnerable society behind them. During the Cold War, the most substantial threat to American survival was the armed forces of the Soviet Union, which the United States mirror imaged when designing, training, and equipping its national security apparatus. The collapse of the Soviet Union is undoubtedly an absolute gain for U.S. national security, as the country is no longer at serious risk of instantaneous annihilation. However, the demise of the Soviet Union has not removed all threats to U.S. national security. In the post-Cold War world, asymmetric threats to U.S. national security are far more likely than they were just a decade ago.

Asymmetric threats counter an adversary's strengths by focusing on its weaknesses. The U.S. Army Training and Doctrine Command's *Future Operational and Threat Environment: A View of the World in 2015*, published on 12 April 2000, concludes that "potential threats . . . will use asymmetric responses to counter U.S. conventional military advantages and will seek sanctuary in complex and urban terrain while attempting to deny access to U.S. force projection."¹ After a brief introduction of the entire paper, the remainder of this first chapter will examine the differences between

symmetric and asymmetric threats, proposing that asymmetric threats can be understood through the perspective of “ends, ways, and means.”

Research Questions

The primary research question this paper will attempt to answer is: What kinds of threats will concern the U.S. in 2010, and what should the U.S. do now to increase its security against asymmetric threats in the midfuture? There are several subordinate research questions that must also be examined:

1. What is an asymmetric threat?
2. What will be the shape of the world in 2010?
3. What kinds of asymmetric threats will concern the U.S. in 2010, and what will be the origin of these threats in 2010?
4. What should the U.S. do now to increase its security against asymmetric threats in the mid-future?

Thesis Overview

After defining asymmetric threats in this first chapter, the paper relies upon a review of the current literature on the future of the international system to the year 2010 and on likely future threats. Obviously, these predictions cannot be proven, but they can be supported with evidence and with logic. There is a distinction between prediction and forecasting in defense affairs. In the former, the prime value is precision; this is good for the 10-meter range, but very bad for longer ranges. For the longer range, only forecasting will do, for there the prime value is not precision but flexibility, to anticipate and if possible to orchestrate circumstances in which one might jump any number of directions

in reaction to developments.² This paper makes the assumptions that no peer competitors to the United States will arrive in the near future; that the process of globalization will continue; that states will remain the primary actors in the international system but that nonstate actors will play an increasingly important role; and that democratic industrialized states are far less likely to go to war with each other than are nondemocratic nonindustrialized states.³

Accepting these assumptions allows this paper to build a picture of a likely world order in 2010 based upon current international relations theory and historical trends. Applying international relations theory--especially Michael Doyle's Democratic Peace theory and Thomas Friedman's globalization theory, but also Hans Morgenthau's basic balance of power theory and Ken Waltz' structural realism--to the recent past and to current world events produces a picture of the world of 2010.

The next step is discovering what vulnerabilities the United States will suffer from symmetric and asymmetric threats in that future world. Future threats include both "states of concern" and nonstate actors that may use nuclear, chemical, and biological weaponry in order to accomplish political objectives through the asymmetric use of force, all of which are more dangerous when coupled with proliferating missile technology. Cyberwarfare also presents an asymmetric threat for which the United States is sadly unprepared. While the U.S. will probably be able to continue to deter most states with its nuclear and conventional forces, it is less clear that nonstate actors can be deterred through the threat of reprisals--or that they will leave evidence of their geographic location behind after they have struck. This section will therefore focus upon nonstate

actors and on their motivations and capabilities for inflicting serious damage upon the United States, if necessary at the cost of their lives.

The case of the warriors fighting against Task Force Ranger in Mogadishu on 3 October 1993 will be examined as an example of the sort of extreme dedication to a cause, or *asymmetry in ends*, that is likely to cause problems for the United States in years to come; the Battle of Mogadishu is an excellent example of an asymmetric threat defeating conventional U.S. forces, at least at the strategic level. In this light, the emerging Western attitude toward extreme casualty aversion will also be examined both for the truthfulness of the prevailing wisdom on this notion and for the advantage this attitude may provide to those whose interests are inimical to those of the United States.

The final chapter of the paper will examine what may be the largest single threat to the national security of the United States over the next ten years: bureaucratic and organizational politics in the Department of Defense and in the Executive Branch as a whole. Military organizations are infamous for their inability to adapt to changing circumstances, and the end of the Cold War and eruption of asymmetric threats are but the latest of a long line of problems in successful innovation and adaptation. Evaluating the problems the military services and the Department of Defense are experiencing in adapting themselves to the asymmetric threats that will confront the United States in 2010 is the first step toward reducing America's vulnerability to those who would hit the United States where it least expects. First, however, must come a better definition of symmetric and asymmetric threats.

Thinking about Symmetric and Asymmetric Ends, Ways, and Means

A useful way to consider asymmetric threats is from the perspective of ends, ways, and means, one traditional definition of strategy.⁴ This perspective requires an examination of American and “enemy” (including both “state of concern” and nonstate actors’) *objectives* as well as several *means* of projecting force asymmetrically, which may include nuclear, chemical, and biological coupled with proliferating missile technology or cyberwarfare. It also suggests that even such apparently symmetrical means of applying force as AK-47s and Stinger missiles can be asymmetric threats if they are used in certain *ways*.

The *end* that a nation (or other political entity) seeks is the single most important strategic decision in any use of violence for political objectives. “National interest” is a commonly used shorthand for these ends; the current national security strategy of the United States of America divides US national interests into the categories of “vital,” “important,” and “humanitarian” and suggests that the United States is prepared to devote different amounts of its resources in the pursuit of objectives that fall into each of these categories.⁵ What *A National Security Strategy for a Global Age* does not discuss is the fact that interests that the United States classifies as “humanitarian” or even as “important” its opponents may perceive as vital survival interests. One of the many explanations for America’s defeat in Vietnam is that ultimately it was far more important to the North Vietnamese that South Vietnam would fall under its control than it was to the United States that South Vietnam would remain free. Unfortunately, this basic asymmetry in strategic calculus was not understood in Washington until after some 57,000 Americans (but an estimated four million Vietnamese) had died in a war over that

end.⁶ Similar asymmetries of ends underlay the American strategic failure (if tactical victory) in Mogadishu, Somalia. The U.S. would do well to ponder just how important the achievement of strategic *ends* is to it--and is to its opponent--before future battles erupt.

How important those ends are is an important determinant of what *means* the U.S. and its enemies are prepared to use in their pursuit. Other than American national survival, it is difficult to imagine strategic objectives in the pursuit of which the United States would resort to the use of nuclear weapons. Even during the Persian Gulf War, when the United States government made broad hints that it might respond with nuclear weapons to an Iraqi use of chemical weapons against U.S. forces, conventional weapons were sufficient to deter Iraqi chemical attacks.⁷ However, it is by no means certain that other states--and, in particular, other nonstate actors--will be deterred by America's nuclear forces nor that they will determine that what they perceive as their survival is not worth the use of the ultimate weapon if they are able to acquire one.⁸ It is thus worth delving into weapons of mass destruction--and the emerging weapon of mass disruption known as "cyberwar"--as sadly plausible *means* of asymmetric warfare.

Ways refers to the tactics, techniques, and procedures by which means are used in the pursuit of strategic ends. The Viet Cong used such apparently symmetrical weapons as AK-47s and artillery rounds against the United States in very unconventional ways; indeed, the whole strategy of guerrilla warfare can be described as an asymmetric way to use what may be reasonably conventional means in the pursuit of strategic goals.⁹ It is also possible to use unconventional means such as the aforementioned weapons of mass destruction in an unconventional way; this combination of asymmetric ways and means

in the pursuit of what are perceived to be survival-level ends by America's opponents--an asymmetric trifecta, as it were--is perhaps the most troubling of all national security threats to the United States for the coming decade. A diagram representing symmetric and asymmetric ends, ways, and means is presented in figure 1.

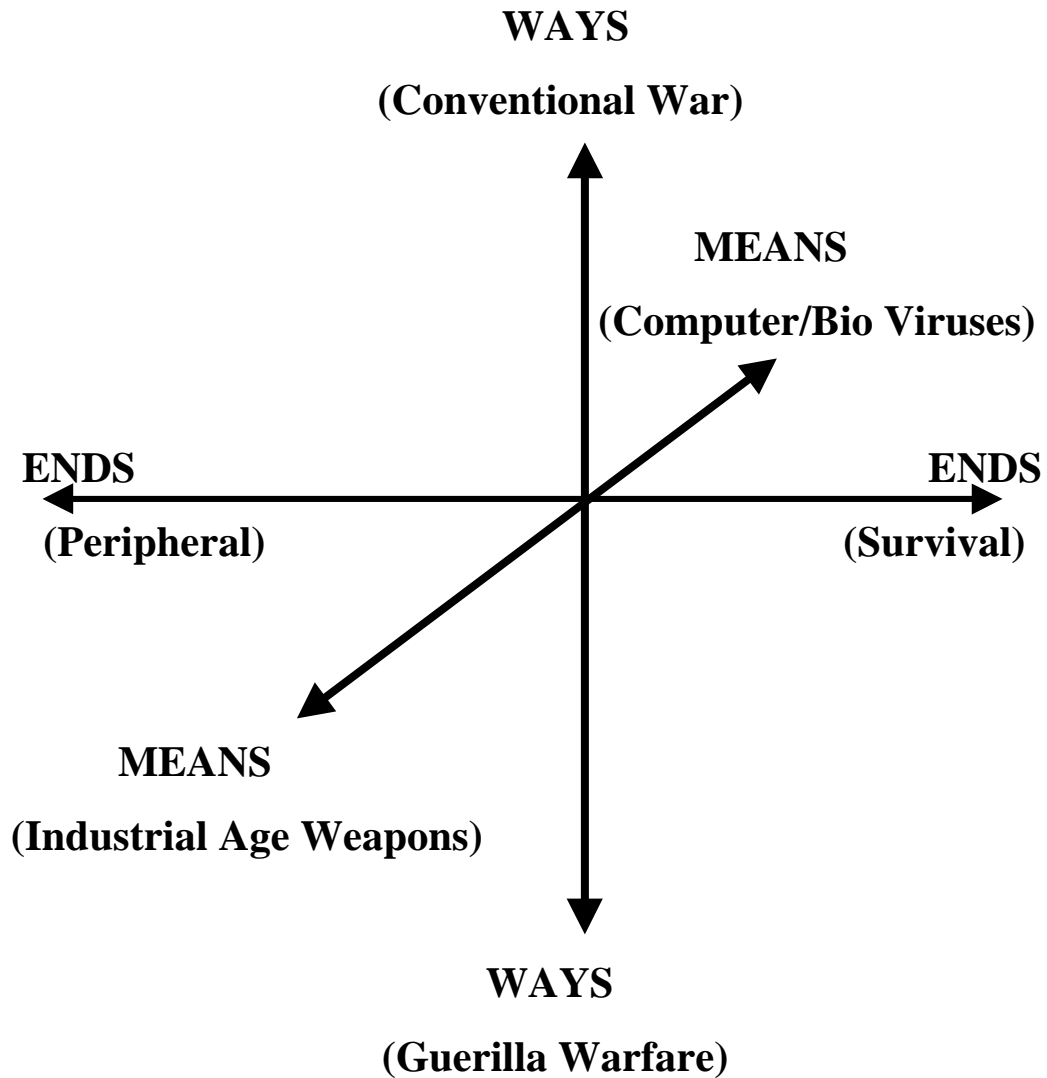


Figure 1: The Ends, Ways, and Means of Asymmetric War

The United States is currently best prepared to confront a conventional threat to its national interest which uses industrial-age means in Western-style warfare, the technique the Iraqi Army chose to use in the Persian Gulf War of 1990-91. The 25 June 1996 truck bomb attack on the Khobar Towers US Air Force barracks used conventional means--high explosives--in an unconventional way (a guerrilla-style truck bombing) to try to convince the United States that the objectives it was pursuing by maintaining no-fly zones over Iraq were not worth the price; it took advantage of several asymmetries.¹⁰ The most asymmetric threat this author can imagine would be a nonstate actor using biological weapons in the pursuit of an objective it considered vital that the United States considered humanitarian (and obligingly classified as “not worth the loss of a single American life” in the initial briefing to the press on the commitment of American forces there). This asymmetric use of force would be especially difficult for the U.S. to deal with if the nonstate actor was disciplined enough to maintain strict silence in the international press about its role in the attack, leaving the US unable to determine where to direct reprisals--and, interestingly, especially if the attack were nonlethal. If all of the American soldiers deployed to Mogadishu had simply gotten cholera from water infected by a terrorist cell, the enemy strategic objective of removing the US military from Somalia might have been accomplished without the loss of any American--or any Somali--lives.

Summary: The Ends, Ways, and Means of Asymmetric Warfare

This first chapter has suggested that asymmetry is a useful tool for thinking about threats that may confront the United States in the future, and that threats may be asymmetric in terms of ends, ways, or means--or, perhaps most difficult to deal with, in all three components of asymmetry.¹¹ The paper now turns to questions about the state of the world in 2010 and the likely asymmetric threats to the United States in that world after a brief examination of qualitative research methodology.

1

¹²

¹U.S. Army Training and Doctrine Command, *Future Operational and Threat Environment: A View of the World in 2015*. (Ft. Monroe, Virginia: U.S. Army Training and Doctrine Command, 12 April 2000), 20.

²The author is grateful to Dr. Roger Spiller, Marshall Chair of Military History at the U.S. Army Command and General Staff College, for this distinction and for many other pointed questions during the preparation of this paper.

³These assumptions very closely parallel, but were developed independently from, those of the U.S. Army Training and Doctrine Command's *Future Operational and Threat Environment: A View of the World in 2015*, 2-3. This should be a cause of some concern for TRADOC.

⁴Dr. Roger Spiller of the US Army's Command and General Staff College suggested this perspective.

⁵William Jefferson Clinton, *A National Security Strategy for a Global Age* (Washington, D.C.: The White House, December 2000), 4.

⁶Among the multitude of books that make this point is the well-named *Strange War, Strange Strategy* by Lewis W. Walt (New York: Funk & Wagnall's, 1970). Figures on casualties in the Vietnam War are from Stanley Karnow, *Vietnam: A History* (New York: The Viking Press, 1983), 11.

⁷BBC Documentary on the Persian Gulf War, Televised Interview with GEN Colin Powell. When asked whether the United States would actually have used nuclear weapons against Iraq in retaliation for chemical strikes, General Powell relied that it would have instead used precision-guided conventional missiles to destroy the dams over the Tigris and Euphrates Rivers, putting all of Baghdad under seven feet of water.

⁸Jonathan Schell makes this point in “The Folly of Arms Control”, *Foreign Affairs* 79, 5 (September/October 2000), 33.

⁹Still the best book on this subject is Robert B. Asprey’s *War in the Shadows: The Guerrilla in History* (New York: William Morrow, 1994).

¹⁰See William Perry, *Department of Defense Report To The President on Khobar Towers Bombing* (Washington, DC: September 1996), available at www.pollux.com/defenseweb/1996/sept96/khobar.htm

¹¹The author is grateful to LTC Jon Cleaves, who pointed out a number of difficulties with the term “asymmetry” and suggested the use of the term “adaptive” instead, but has concluded that the term asymmetry, despite its many problems, is the accepted term for the phenomenon he wishes to examine. He is hopeful that the framework he suggests proves useful in resolving the murkiness of the term.

¹²

CHAPTER 2

METHODOLOGY

All theses have a story, but this one's tale is more unusual (or at least more lengthy) than most. The author has been privileged to have been in positions that allowed him to think about a number of the subordinate issues that the thesis touches on over the past five years. This chapter will briefly review that work and place this thesis in the context of those earlier efforts before moving on to a discussion of qualitative research methodology and how it was applied in this paper.

From 1995 through 1997, the author was a doctoral student at Oxford University. Under the supervision of Professor Robert O'Neill, Chichele Professor of the History of War, he researched British and American Army counterinsurgency learning during the Malayan Emergency and the Vietnam War, evaluating the hypothesis that military organizational culture effects the ability of military institutions to adapt to changes in warfare.¹ He came away convinced that organizational culture is a critical variable in explaining whether and how military organizations will adapt and possessed with a strong respect for Russell F. Weigley's contention that long before Vietnam "the strategy of annihilation became characteristically the American way in war."²

For the next three years, the author taught international relations, American foreign policy, and national security strategy at the United States Military Academy at West Point. This experience provided an opportunity to think deeply about the nature of the international system both during the Cold War and in its aftermath. During that time the author was privileged to work with Professor Don Snider of the U.S. Military

Academy's Department of Social Sciences and Major Tony Pfaff of the Department of Philosophy on an examination of the impact of casualty aversion on American foreign policy. That paper led to an appreciation for the fact that states and individuals that are willing to accept heavy casualties in the pursuit of their objectives may have an advantage over the United States in the absence of committed senior leadership and a consensus on the goals of American foreign policy and the price America is willing to pay to achieve those goals.³

Term membership at the Council on Foreign Relations provided exposure to many top academics and policy makers concerned with foreign policy. A Summer 1999 internship in the office of the Deputy Assistant Secretary of Defense for Requirements, Plans, and Counterproliferation was enormously rewarding in the insights it provided into future threats to the United States and how arms control might be used as a tool to increase U.S. national security--or to decrease that security if used improperly.⁴

That research was sponsored by the Institute for National Security Studies (INSS) at the United States Air Force Academy, which provided another grant to research the question of "Asymmetric Threats to U.S. National Security to the Year 2010" in November of 1999. That grant, while much appreciated, did not see use until the author arrived at the Command and General Staff College in June 2000. Research over the summer and into the fall, including an introduction to Major John Cleaves of the Threat Directorate, led to a preliminary paper that was submitted to the INSS in October 2000 and which was presented at the INSS Annual Results Conference in November. That research was judged to be of sufficient merit for the author to be given an additional research grant to more thoroughly explore the topic. This paper is the result.

Qualitative Research Methodology

Qualitative research is the process of inquiring into a problem that cannot be well solved through the use of empirical methods.⁵ Primary and secondary materials serve as the “data” to be analyzed by the study; the researcher gathers these materials and then analyzes them critically to determine their relevance to the question at hand. The key methodological questions that must be answered are how research materials are to be selected and how they are to be interpreted once selected. These questions are of particular relevance in a study of the future, inherently more subjective and controversial than most studies of the past. It is especially important in such a study that assumptions and facts are explicitly formulated and that the process through which those facts and assumptions are extrapolated into an understanding of the future is also clearly presented. Explaining this process will be the task undertaken for the remainder of this chapter.

Historical researchers often use a six-step research format similar to the scientific method.⁶ It has been described as consisting of:

1. Identifying and isolating the problem
2. Developing a hypothesis
3. Collecting and classifying source materials, and determining facts by internal and external criticism
4. Organizing facts into results
5. Forming conclusions
6. Synthesizing and presenting the research in organized form.⁷

This is very much the research format that this paper has followed, with the exception that many of the source materials, like the paper itself, extrapolate from current information to deduce the most likely state of the future. This paper has also faced the additional complication that it has had to use the procedure thrice: once to think about the likely state of the world order in 2010, once to think about the likely threats to the

United States in that world order, and once to contemplate ways to increase U.S. national security in light of those threats. In all cases the same methodology was used, and this chapter will discuss each topic considered in turn. Step 4, “Organizing facts into results,” and Step 6, “Synthesizing and presenting the research in organized form,” are omitted from this discussion but may be evaluated in Chapters Three, Four, and Five.

Thinking about the World of 2010

Step 1. Identifying and isolating the problem

The primary research question was, “What will the international system of the year 2010 look like?”

Step 2. Developing a hypothesis

The preliminary hypothesis was that the end of the Cold War and of the bipolar world order would dramatically change the international system. This is not an original hypothesis; Ken Waltz postulated the same idea in 1979 in his *Theory of International Politics*.⁸ Michael Doyle’s “Democratic Peace” hypothesis, which postulates that liberal democratic states are less likely to go to war with each other than are nondemocratic states, and its implications for the future state of international relations are also evaluated.⁹

Step 3. Collecting and classifying source materials, and determining facts by internal and external criticism

Key source materials included Don Snow’s *The Shape of the Future*¹⁰ and the Joint Staff’s 1998 study of the future of the international system¹¹ as well as TRADOC’s analysis of that same question.¹² Thomas Friedman’s *The Lexus and the Olive Tree* was also very significant because of the thinking it stimulated about globalization and its role

as both an integrating and fragmenting mechanism.¹³ Robert Kaplan's presentation to SAMS on 11 December 2000 inspired me to read *Eastward to Tartary* and *The Ends of the Earth*;¹⁴ his thinking was a significant corrective to the "globalization solves everything" perspective of Friedman. Interviews with Ken Waltz and with a number of defense officials in the Pentagon during the summer of 1999 also helped solidify my thinking on this very nebulous topic.

Step 5. Forming conclusions

The evidence gathered in Chapter 4 should either confirm or deny the hypothesis that the end of the Cold War and of the bipolar world order would dramatically change the international system. The test used will be one of the preponderance of reasonable evidence, assigning more weight to sources of greater academic distinction and those that demonstrate the most thorough research themselves. Sources that display an obvious bias will be discounted accordingly, and particular attention will be paid to the position of the authors at the time of writing and their backgrounds. Where you stand on an issue often depends upon where you sit¹⁵ and those with a particular axe to grind sometimes have a forest in mind which blocks the view from their picture window--or from which they intend to harvest the lumber to build their picture window.

Preliminary conclusions confirm the original hypothesis: that the world will be dramatically different because of the end of the Cold War. Among the most important implications of the end of the Cold War is a dramatic decrease in interstate conflict in what Snow calls the "First Tier" of states. The fact that the great powers are unlikely to go to war with each other is a dramatic change in international politics. Unfortunately, this does not mean an end to conflict in the international system; instead, there will be

substantial conflict within the Second Tier of states, as well as between Second and First Tier states. Conflict in that last category is likely to be asymmetrical.

Thinking about Asymmetric Threats to the United States in the World of 2010

Step 1. Identifying and isolating the problem

The introductory chapter dealt with the question of defining asymmetric threats. The purpose of this chapter is to combine that concept with conclusions about the future of international relations to determine what the likely threats to the United States in the year 2010 are likely to be.

Step 2. Developing a hypothesis

The hypothesis to be tested is: While the United States will continue to face potential symmetric threats in the year 2010, it is far more likely that it will be challenged asymmetrically than symmetrically over the next decade and beyond.

Step 3. Collecting and classifying source materials, and determining facts by internal and external criticism

There is a wealth of literature on this subject. Perhaps the single most important source for this section was the transcript of the Army War College's 1998 conference on asymmetric threats, *Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated?*¹⁶ Other valuable sources included the TRADOC Deputy Chief of Staff for Intelligence's *Future Operational and Threat Environment: A View of the World in 2015*¹⁷ and the National Intelligence Council's "Global Trends 2015" report.¹⁸

Step 5. Forming conclusions

The evidence gathered in Chapter Four should either confirm or deny the hypothesis that while the United States will continue to face potential symmetric threats in the year 2010, it is far more likely that it will be challenged asymmetrically than symmetrically over the next decade and beyond. As in the previous chapter, the test used will be one of the preponderance of reasonable evidence, assigning more weight to sources of greater academic distinction and those that demonstrate the most thorough research themselves. Sources that display an obvious bias will be discounted accordingly, and particular attention will be paid to the position of the authors at the time of writing and their backgrounds.

Preliminary results tend to support the hypothesis that, while the United States will continue to face potential symmetric threats in the year 2010, it is far more likely that it will be challenged asymmetrically than symmetrically over the next decade and beyond.

Improving America's Defenses Against Asymmetric Threats

Step 1. Identifying and isolating the problem

Given the preliminary conclusions on the future of the international system in 2010 and on the nature of threats to the United States in that world, the final question this paper attempts to answer is, "What should the U.S. do now to increase its security against asymmetric threats in the future?"

Step 2. Developing a hypothesis

The hypothesis to be tested is that the United States will have to make substantial changes in the organization, training, and equipping of its armed forces to make itself

better able to confront the asymmetric threats it is likely to face in the 21st century while retaining the ability to deter symmetrical threats to itself and its allies.

Step 3. Collecting and classifying source materials, and determining facts by internal and external criticism

There is a wealth of literature on this subject. A “preponderance of reasonable sources” technique will be used once more with particular reference to several sources that examine similar questions to the ones discussed in this chapter. These will include the U.S. Commission on National Security in the 21st Century’s reports “New World Coming: American Security in the 21st Century”¹⁹ and “Seeking a National Strategy: A Concert for Preserving Security and Promoting Freedom.”²⁰ Also quite useful will be Russell Howard’s “The National Security Act of 1947 and Biological and Chemical Weapons: A Mid-Century Mechanism for New Millennium Threats.”²¹

Another useful source for this section will be the transcript of the Army War College’s 1998 conference on asymmetric threats, *Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated?*²²

Step 5. Forming conclusions

The sources evaluated throughout the thesis provide suggestions for better ways to organize, train, and equip the Armed Forces of the United States for the challenges of the 21st Century. Those modifications will ensure that the United States maintains an overmatch capability in symmetrical ways and means, while increasing its ability to deter, prevent, and respond to asymmetrical warfare.

Summary

This chapter has explained the research methodology used in this thesis to evaluate the research questions “What will be the shape of the world in 2010?” “What kinds of asymmetric threats will concern the U.S. in 2010, and what will be the origin of these threats?” and “What should the U.S. do now to increase its security against asymmetric threats in the mid-future?” to build an answer to the broader research question, “What kinds of threats will concern the U.S. in 2010, and what should the U.S. do now to increase its security against asymmetric threats in the mid-future?” The paper now turns to the first question, that of the state of the world in 2010, a chapter that is built upon an extensive review of international relations and “future trends” literature.

23

¹John A. Nagl, “Learning to Eat Soup with a Knife: British and American Army Counterinsurgency Learning during the Malayan Emergency and the Vietnam War” (Oxford University: Unpublished Doctoral Dissertation, 1997). An article of the same name was published in *World Affairs* 161, no. 4 (Spring 1999): 193-199.

²Russell F. Weigley, *The American Way of War: A History of United States Military Strategy and Policy* (Bloomington, IN: Indiana University Press, 1973).

³Don M. Snider, John A. Nagl, and Tony Pfaff, *Army Professionalism, the Military Ethic, and Officership in the 21st Century* (Carlisle Barracks, PA: U.S. Army War College Strategic Studies Institute, 1999).

⁴That work was published as “Defending Against New Dangers: Arms Control of Weapons of Mass Destruction in a Globalized World” *World Affairs* 162, no. 4 (Spring 2000): 158-173; and as a chapter in James M. Smith, Ed., *Searching for National Security in an NBC World* (Colorado Springs, CO: INSS Press, 2000).

⁵The author is grateful to Dr. Bruce Menning of the Department of Joint and Multinational Operations at the U.S. Army Command & General Staff College for his help with this chapter, especially his “First Cut on the Method Shell for Qualitative Research” handout, on which this section of the chapter is based.

⁶Jon S. Cleaves, “In Search of an Enduring Military Theory: Examining the U.S. Army’s Principles of War” (MMAS thesis, Ft. Leavenworth, KS: U.S. Army Command and General Staff College, 1997), and Scott C. Cottrell, “Identifying the Roles of the Separate Governmental Agencies in Countering the Proliferation of Weapons of Mass Destruction among Nonstate Actors throughout the Counterproliferation Continuum” (MMAS thesis, Ft. Leavenworth, KS: U.S. Army Command and General Staff College, 1997), were both useful methodological examples.

⁷Gary W. Moore, *Developing and Evaluating Educational Research* (Boston: Little, Brown and Company, 1983), 181.

⁸Ken Waltz, *Theory of International Politics* (New York: McGraw-Hill, 1979).

⁹Michael Brown, Sean Lynne-Jones, and Steven Miller, *Debating the Democratic Peace* (Boston: MIT University Press, 1996).

¹⁰Donald M. Snow, *The Shape of the Future: The Post-Cold War World* (New York: M.E. Sharpe, 1995).

¹¹Appendix 1, *Joint Strategy Review: 1998 Report* (Secret), (Washington DC: Joint Staff Publishing, September 1998). The Appendix is unclassified. See also “The Road to 2050: The New Geopolitics,” *The Economist*, (31 July-6 August 1999), 1-16.

¹²U.S. Army Training and Doctrine Command, *Future Operational and Threat Environment: A View of the World in 2015*. (FT Monroe, Virginia: U.S. Army Training and Doctrine Command, 8 September 2000).

¹³Thomas Friedman, *The Lexus and the Olive Tree: Understanding Globalization* (New York: Farrar, Straus, Giroux, 1999).

¹⁴Robert Kaplan, *Eastward to Tartary: Travels in the Balkans, the Middle East, and the Caucasus* (New York: Random House, 2000), and *The Ends of the Earth: A Journey to the Frontiers of Anarchy* (New York: Vintage Books, 1996).

¹⁵Graham Allison, *Essence of Decision: Explaining the Cuban Missile Crisis* (New York: Harper-Collins, 1971).

¹⁶Lloyd J. Matthews, ed. *Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated?* (Carlisle, PA: U.S. Army War College, 1998).

¹⁷*Op. cit.*

¹⁸National Intelligence Council, “Global Trends 2015,” available at <http://www.cia.gov/cia/publications/globaltrends2015/>

¹⁹Gary Hart and Warren Rudman, eds., “New World Coming: American Security in the 21st Century,” available at www.nssg.gov/Reports/NWC.pdf

²⁰Gary Hart and Warren Rudman, eds., “Seeking a National Strategy: A Concert for Preserving Security and Promoting Freedom,” available at www.nssg.gov/PhaseII.pdf

²¹In James M. Smith, ed., *Searching for National Security in an NBC World* (Colorado Springs, CO: INSS Press, 2000).

²²Lloyd J. Matthews, ed. *Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated?* (Carlisle, PA: U.S. Army War College, 1998).

23

CHAPTER 3

LITERATURE REVIEW:

THINKING ABOUT THE WORLD OF 2010¹

During the Cold War, the most substantial threat to American survival was the armed forces of the Soviet Union, which the U.S. mirror-imaged when designing, training, and equipping its own national security apparatus. The collapse of the Soviet Union is undoubtedly an absolute gain for U.S. national security, but the demise of the Soviet Union has not removed all threats to U.S. national security. Ironically, in the post-Cold War world--what Donald Snow calls a “world of tiers”--asymmetric threats to US national security are far more likely than they were just a decade ago, and the country may be at greater risk of suffering from attacks on U.S. soil now than it was during all but the darkest days of the Cold War.

A World of Tiers

It has been ten years since history ended with the verdict that free-market capitalism was the only viable means of allocating resources at the state level, and in those ten years the outlines of the new world order have emerged.² Donald Snow is one of the most innovative thinkers writing today about “the shape of the future.”³ His book of that title provides a framework that is a useful way to make sense of the rapidly changing world of the early 21st century.

Snow is in many ways a structural realist who believes that the structure of the international system matters and that the number of pole states in the system affects much of what happens in the world. Snow looks at the world in the wake of the collapse of the Soviet Union and finds just one superpower, forming what Ken Waltz would call a

unipolar world.⁴ Snow argues that the United States has shaped much of the world in its own image through its economic hegemony and regime formation, helping to create what he calls the “First Tier” of economically advanced liberal democracies. Michael Doyle refers to this same group of states as a “Zone of Peace” within which war is essentially inconceivable.⁵ It is difficult to overstate the importance of this development; for the first time in history, the “great powers” of the international order have essentially renounced the use of force against each other as a means of settling disputes. Much of this change is based on the shared economic systems of the industrialized democracies. Francis Fukayama has gone so far as to describe the triumph of liberal capitalist democracy as “The End of History,” arguing that this system has proven so successful that there is simply no imaginable alternative to it.⁶

However, the First Tier comprises only about one-seventh of the world’s population. The rest of the globe--ruled by governments which are either not fully democratic, do not have industrialized capitalist economies, or both--does not enjoy the same freedom from concerns about warfare among states or inside their own states. Instead, traditional balance of power politics, mercantilism, and instrumental nationalism continue all too often to make life “nasty, brutish, and short.” The primary problem of international relations for the foreseeable future is how the states of the First Tier will deal with those that languish in the Second Tier. Under what circumstances will the industrialized democracies of the world intervene in conflicts among Second Tier states--or within them? Will the people of the First Tier support intervention in conflicts on the periphery when the vital interests of their states are not affected? Will they demand such intervention when through the miracle of cable television they see and hear horrible

atrocities inflicted upon innocent people? These are vitally important questions that the countries of the First Tier have not yet conclusively answered. Figure 2 illustrates National Security in a World of Tiers.

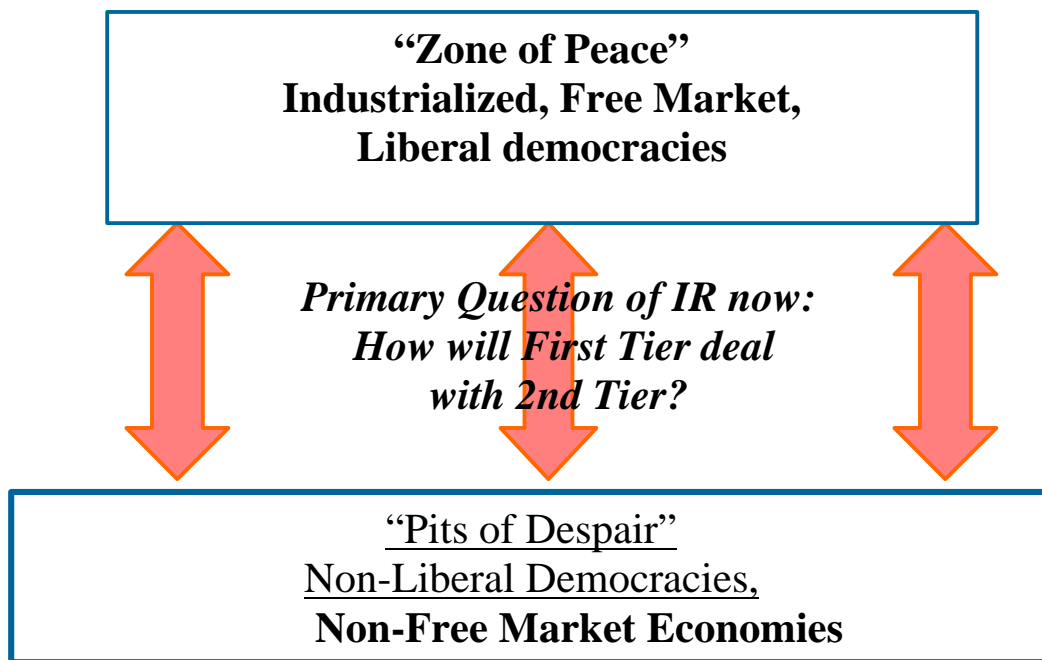


Figure 2: National Security in a World of Tiers

Forces of Change

There are a number of study groups contemplating the shape of the next twenty-five years, from the National Security Study Group (NSSG) to the Center for Strategic

and International Security (CSIS)⁷ to the Joint Strategy Working Group (JSWG). The JSWG has identified several trends that it believes will shape the global security environment of 2025: demographics, politics, economics, energy, environment, technology, information, and military patterns of change and continuity. This paper will take a quick glance at each, drawing largely but not exclusively from the Joint Staff's work.⁸

Demographics: Although world population growth will continue to slow down, the vast majority of world population growth will come in the underdeveloped regions of the world. The vast majority of population growth will occur in urban areas, which will become far larger and more crowded over the next twenty-five years. By the year 2020, more than one-half of the world's populations will live in urban areas.

Politics: In the words of the Joint Staff, "The concept of 'democracy', that is, some sort of participatory system accountable to the people and responsive to public opinion, increasingly forms the basis of government in the world. The nation-state remains the principal actor in global politics, though there has been a concurrent rise in the power of nonstate actors." Interstate wars continue to decline, especially between the major powers, while intrastate wars are increasing in both number and ferocity of violence.

Economics: The world economy is becoming far more integrated. Transnational corporations (TNCs) now control over a third of all world production; 40 percent of world trade occurs within TNCs. While economic conditions have improved in a number of second-tier nations, many of the poorest countries have fallen even further behind and risk being completely marginalized from the mainstream of global economic progress.

About 30 percent of the developing world's population, or some 1.1 billion people, live on less than a dollar a day.

Energy: World demand for petroleum has increased by 1 percent annually since 1975, with the fastest growth in demand occurring in China and East Asia. The United States imported 48 percent of its oil in 1997, 17 percent of that (8 percent of total U.S. demand) from the Persian Gulf. Total imports provided came from Venezuela (18 percent), Mexico (14 percent), Canada (15 percent), Nigeria (7 percent), Angola (4 percent), and Norway (3 percent). The Persian Gulf is the single most important source of world oil, with 64 percent of world reserves and 26 percent of world production. Japan now imports 70 percent of its total demand from the Gulf.

Environment: Resource scarcity is an increasingly important problem, and will impact upon national security in increasingly pressing ways. The world's supply of water per capita in 1994 was one-third of what it had been in 1970; wars over water may occur in Southwest Asia and elsewhere over the next thirty years. Desertification affects up to 70 percent of potentially productive drylands, according to the United Nations Environmental Program.

Technology: The majority of all research and development is now done by the commercial sector, rather than by the government and the military. Civilian research and development has increased the availability of militarily significant dual-use technology to far more actors in the system.

Information: Advances in information technology have increased both the availability and speed of dissemination of information to a far larger percentage of the world's population. Imaging technology is now widely available. In 1996, the

commercial space industry outspent government spending on space; space-based systems will become increasingly important. The United States and the remainder of the Western world have become dependent on information-based technologies and will not be able to function as societies or as militaries without them.

Military: Technological advances and proliferation have enabled many countries and some individuals to improve their military capabilities relative to those of the United States, especially in the areas of chemical and biological weaponry. Developing countries focus their purchases on air defense, missile technology, and aircraft. Their defense expenditures are declining, albeit at a slower rate than those of developed countries, with the exception of Asia, which is currently experiencing 2.5 percent real growth in procurement budgets annually. The proliferation of Weapons of Mass Destruction (WMD) and long-range delivery systems is enabling countries to threaten others at greater ranges with more accuracy and lethality. The United States leads the pack and is pulling away in information technology, doctrine, joint integration, communications, general research and development, advanced aircraft, and miniaturization.

A Global World

In thinking about what the first decade of the new millennium will look like and what challenges and opportunities it will present to the American national security system, this section draws heavily upon the assumptions listed above and on Thomas Friedman's *The Lexus and the Olive Tree: Understanding Globalization*.⁹ According to Friedman, "the post-Cold War world" can be better defined as a "globalizing" world. Globalization is "the overarching international system shaping the domestic politics and

foreign relations of virtually every country.”¹⁰ It “involves the inexorable integration of markets, nation-states and technologies to a degree never witnessed before,”¹¹ and it “means the spread of free-market capitalism to virtually every country in the world.”¹² As Francis Fukayama noted, there is simply no viable alternative to free-market capitalism in the wake of the Soviet collapse.¹³

This fact has implications far beyond trade policy, for, as Michael Mazaar and many others argue, “Free markets generally produce free polities.” Particularly in the post-Cold War world, the demands of competing in the global economy create compelling pressures for free transfers of information in the economic realm--and systems which transfer information on prices and economic demands also carry political demands. While not an absolute correlation, “the resulting trend in the direction of democracy is undeniable: from almost zero several hundred years ago, the percentage of countries in the world that could roughly be described as democratic may exceed 80 percent by the year 2005.”¹⁴ This trend is likely to continue as globalization progresses.

One primary driver of globalization is information technology. Friedman believes, like Heidi and Alvin Toffler, that the third great revolution of human existence is information technology, and that it will transform human life as dramatically as did the invention of agriculture some 5000 years ago¹⁵ and as did the industrial revolution two centuries ago. The world is now are at a very early stage of the information revolution, and its impact on people’s lives over the next thirty years can barely be imagined, but it is already opening up the world in many dramatic ways. As Dale F. Eickelman recently noted of the Muslim world, “Quite simply, in country after country, government officials, traditional religious scholars, and officially sanctioned preachers are finding it

very hard to monopolize the tools of literate culture. The days have gone when governments and religious authorities can control what their people know, and what they think.”¹⁶

The United States is uniquely well positioned to take advantage of the information revolution. For a number of reasons ranging from labor mobility to tax structures to immigration policies, the United States is well out in front of the race for superiority in the information revolution--and its lead is increasing. This fact has profound implications for the national security of the United States over the next three decades. The United States will set global standards for information technology--in fact, it already has--and also for global taxation policies, financial accounting rules, and for transparency in financial transactions.¹⁷ This “soft power”¹⁸ will immensely broaden both the reach and the grasp of the United States in the world. A globalized world will increasingly look and act American, a fact that is, in almost all ways, a good thing for U.S. national security. Michael Mazaar notes “the effect of socioeconomic convergence on the likelihood of war among the converging powers: It makes war less likely.”¹⁹

This is not entirely a good news story, for the era of globalization has complicated the national security equation immensely. While during the Cold War the focus of international relations was on the interactions between states--especially the military relations between the two superpowers--more actors now play a role in the globalized system, and will now have to be considered in the formulations of security policy. While relations among states remain important in the globalized world, Friedman argues that “the United States is now the sole and dominant superpower and all other nations are subordinate to it to one degree or another.”²⁰ The United States has always enjoyed an

enviable degree of security because of its geography; that advantage is now being multiplied by its strengths in electronics and soft power. In terms of state-on-state relations, the United States has the greatest power differential in the history of humankind since the Roman Empire²¹--and that lead will increase, not decrease, in the next few decades.

This is not to say that the traditional components of national power are now irrelevant. The United States will continue to use its nuclear and conventional arsenal to deter attacks on its homeland and allies, and will rely upon diplomacy and arms control to retain good relations and diminish threats internationally--but, unlike the past 225 years of U.S. history, interstate threats will not be the primary concern of U.S. policy. The mere fact that America maintains such a huge advantage in the conventional characteristics of military power makes it unlikely that adversaries will choose to confront us in that way;²² the rest of the world watched and learned from the conventional arms triumph of U.S. forces in the Persian Gulf war. Few states will again give the U.S. the opportunity to use its strengths against their weaknesses when a conflict of interests erupts.

Instead, the focus will be on the second and especially on the third "balance" of the globalization system.²³ The second balance, between nation-states and global markets, is again one that the United States dominates, and it will be an increasingly effective arena of U.S. foreign policy. Instead of the threat of use of nuclear or conventional forces to get other states to accede to U.S. wishes, the carrot and stick of International Monetary Fund (IMF) bailouts will be used to convince other states to act in ways which will advance U.S. interests--and ultimately, their own. American economic

power, exercised through the IMF, has already had a dramatic impact on national economic policies worldwide through its advocacy of free markets, free trade, and free currency exchange rates, as Fareed Zakaria recently argued in the provocatively titled article, “Is This the End of Inflation?”²⁴

The third balance of the globalized world is the one between nation-states and individuals and transnational actors. The very globalization of the system, its increasing interconnectedness, is a huge source of vulnerability. Individuals and small groups will increasingly be able to access the technology and information that holds the key to the entire system. Those with the desire to do so may attempt to turn the key and bring it all crashing down. This paper will later deal with those individuals and present an analysis of both their increasing power and their motives.

The Two-Tiered World of 2010

The National Intelligence Council does the Central Intelligence Agency’s deep, broad thinking; it “speaks authoritatively on substantive issues for the [Intelligence] Community as a whole.”²⁵ In December 2000 it released *Global Trends 2015: A Dialogue About the Future with Nongovernmental Experts*, an unclassified estimate of the most likely threats the United States will confront over the mid term. The report identifies demographics, natural resources and the environment, science and technology, globalization, national and international governance, future conflict, and the role of the United States as major drivers and trends that will shape the world of the future.

The results are of great importance to military planners. The National Intelligence Council suggests that for at least the next fifteen years “the risk of war among developed countries will be low.”²⁶ However, the developing world will see

substantial conflict, ranging from “relatively frequent small-scale internal upheavals to less frequent regional interstate wars . . . internal conflicts stemming from religious, ethnic, economic or political disputes will remain at current levels or even increase in number.”²⁷ These conflicts will not present a substantial national security threat to the United States, which will pick and choose to which trouble spots it deploys military forces. Because of its overwhelming military superiority over the developing world, most future adversaries “will try to circumvent or minimize U.S. strengths and exploit perceived weaknesses . . . Such asymmetric approaches--whether undertaken by states or nonstate actors--will become the dominant characteristic of most threats to the U.S. homeland.”²⁸

Although the National Intelligence Council hedges its bet that the United States will not face a more serious threat than “states of concern” like North Korea and Iraq by admitting that “estimates of China beyond five years are fraught with unknowables,” the clear conclusion of the report is that asymmetric conflict and American intervention in failed or failing states is far more likely than the sort of conventional armed conflict for which our armed forces are primarily organized, trained, and equipped.²⁹

The National Intelligence Council’s work, in concert with the trends we have examined thus far, lead to several tentative conclusions about the shape of the world in 2010.³⁰ Speaking most broadly, it appears likely that Don Snow’s division of the world into two tiers--one composed of democratic, industrialized countries with free markets, the other composed of countries which are either not liberal democracies or not industrialized capitalist states--will continue to describe the world of 2010. In the words of the National Defense University,

The other great economic powers, the European Union (EU) and Japan, despite occasional friction, are close and trusted allies and friends of the United States. Together, the three have built a democratic, free-market core, which is now spreading throughout the Americas, Europe, and Asia. Consequently, an expanding area of the globe is increasingly peaceful and prosperous. The flow of goods, capital, and know-how throughout this area is growing and being freed from barriers and threats of interruption.³¹

If current trends continue, the First Tier will be larger, with the current Group of Seven Industrialized Nations (G7) joined by South Korea (or a unified Korea led by the South), Australia, Brazil, South Africa, Argentina, Taiwan, and conceivably several other states.

The Second Tier will bifurcate, with a number of states attempting to climb into the First Tier through the development of democratic governments and free-market economies, and some others sinking farther and farther behind.³² The resulting trends are summarized nicely by the National Defense University:

There is no sign that great-power rivalry will displace comity as the essence of U.S.-European or U.S.-Japanese relations, despite the collapse of the Soviet Union. The three largest states outside this core--China, India, and Russia--have embarked on a transition of economic reform and integration. They know that cooperation with the leading core democracies is key to national prospects. By contrast, rogue regimes that reject the norms of the core must rely on oppression to survive and therefore face a bleak future.³³

The global marketplace will both create and enforce regimes, not just governing international trade, but also rules of economic transparency and increasingly governmental transparency as well. This development will be quite largely in our interest, and will promote an international acceptance of norms that will remake the world in our interest. This trend is already at work:

The globalization of both production and markets, enabled by information technology and fostering economic and political reform, is working its way (somewhat unevenly) through Eastern Europe, Latin America, and Southeast Asia. As it does, it is improving living standards, political legitimacy, stability, and security in regions previously among the world's most troubled. Most of the states of these three regions are poised to join the core. From Chile and Argentina to the Czech Republic, Hungary, and Poland, to Malaysia and Thailand, the roots of reform have grown sturdy, and acceptance of core norms has solidified. The United States has an interest in making these gains irreversible and, in time, getting these emerging nations also to accept greater international responsibilities--that is, to become new core partners.³⁴

In an interesting illustration of this point, the citizens of Uzice, a Serbian town which was bombed during Operation Joint Venture, expressed no displeasure at NATO. Ljubise Maksimovic, a 46-year-old railroad foreman, explained his feelings about the Western alliance: "They bombed us because our wrong policies are not in accord with the rest of the world."³⁵

Governments will increasingly rely upon the support of their citizens to govern. In *The Commanding Heights: The Battle Between Government and the Marketplace that is Remaking the Modern World*, Daniel Yergin and Joseph Stanislaw propose five tests which government will have to meet to retain the support of their citizens.³⁶ States which do not do so will face pressures from their citizenry to reform; citizens who feel that their states do not meet these tests may rebel against their own state,³⁷ or against the entire international system which imposes these demands.

The first demand is that states Deliver the Goods in measurable economic terms, including employment and economic growth. The second is that the distribution of those goods be perceived to be Fair, with no excessive concentration of wealth, an effective legal system and transparency of economic rules. The state must continue to maintain a National Identity so that members continue to feel a loyalty to something they believe in;

this is the “Olive Tree” of Friedman’s book title. States must protect the Environment; this need is most pressing for 4.75 billion people who live in the developing world, and this issue is a possible fault line for future North-South conflict. Finally, states must deal with the challenge of Demographics. This is a very different problem in the two tiers of states; the aging population in the First Tier contrasts sharply with the increasing percentage of young people, and hence demand for employment, in the Second Tier, although gradual decreases in population growth will mitigate this issue somewhat over time.

Governments will have to succeed in all of these areas to meet the expectations of their people. Those that do not may face riots in the streets, terrorists’ attacks, or both, as empowered individuals who do not perceive the government as legitimate decide to take action against it. Already, terrorist assaults against the United States have been committed by those who felt that the United States was attacking their national identity (Usama bin Laden), destroying the environment (Unabomber), or treating its own citizens unfairly (Oklahoma City bombing). These attacks from without and within are likely to continue. Because of the proliferation of technology, these attackers may also have the ability to accomplish their desires to bring down the system that is providing health and wealth to an ever-increasing number of their peers around the world. They will present the most serious national security challenge to the United States in the year 2010, and beyond--but not because they will be able to destroy the United States or the international system, for they will not.

The diminished incidence of war among states in the First Tier, the increasing number of liberal democracies in the world and hence increasing size of the First Tier,

and the fact that the United States maintains a substantial national security apparatus to deal with state-on-state threats, lead this author to believe that these substate threats will become relatively more important in the next century. These threats can range the gamut from disgruntled individuals (the Unabomber) and small groups (Timothy McVeigh and his friends) to more formal organizations (the Irish Republican Army) and potentially even more reputable organizations like those that caused havoc at the World Trade Organization meeting in Seattle.³⁸

Whatever their organizational characteristics, the U.S. is sadly unprepared to deal with these international actors of the new millennium. As Ralph Peters has noted, “The U.S. military is magnificently prepared to defeat soldiers. America's forces have the technology, training and raw power to shatter conventional enemies. The threats we face today, though, and are likely to face in the coming decades do not arise from other soldiers, with the disciplined professionalism that term conveys, but from warriors-individuals of volatile allegiance, who are habituated to violence and have no stake in civil order.”³⁹ It is to these sources of asymmetric threats--and the techniques that they will use in their attempts to lash out at a globalized world of 2010 that they do not like and blame on the United States--that this thesis will now turn.

¹This chapter builds upon work funded by the Institute for National Security Studies (INSS) in 1999-2000 that was published as “Defending Against New Dangers: Arms Control of Weapons of Mass Destruction in a Globalized World” *World Affairs* 162, no. 4 (Spring 2000): 158-173; and as a chapter in James M. Smith, ed., *Searching for National Security in an NBC World* (Colorado Springs, CO: INSS Press, 2000): 55-94. The author is grateful to the INSS and to its Director, Dr. Jim Smith, for their patience, and to Dr. Jim Miller, Deputy Assistant Secretary of Defense for

Counterproliferation, Requirements, and Plans, who hosted the author during the summer of 1999 and has taught him a great deal over the past five years.

²Francis Fukayama, *The End of History and the Last Man* (New York: Avon, 1993); and see also his “Second Thoughts” and the responses thereto in *The National Interest* 56 (Summer 1999): 16-44.

³Donald M. Snow, *The Shape of the Future: The Post-Cold War World* (New York: M.E. Sharpe, 1995). See also Snow’s *National Security: Defense Policy for a New International Order*, 3d ed. (New York: St. Martin’s Press, 1995).

⁴Kenneth Waltz, *Theory of International Politics* (New York: McGraw-Hill, 1979). This point also draws upon a discussion with Professor Waltz that the author was privileged to have at West Point in spring 1999.

⁵Michael Doyle, “Liberalism and World Politics,” *American Political Science Review* 80, no. 4 (1986).

⁶Francis Fukayama, *The End of History and the Last Man* (New York: The Free Press, 1992).

⁷Michael J. Mazarr, *Global Trends 2005: The Challenge of a New Millennium* (Washington: CSIS, 1997).

⁸Appendix 1, *Joint Strategy Review: 1998 Report* (Secret), (Washington DC: Joint Staff Publishing, September 1998). The Appendix is unclassified. See also “The Road to 2050: The New Geopolitics,” *The Economist*, 31 July-6 August 1999, 1-16.

⁹See John A. Nagl, “Globalization for Dummies,” *Joint Force Quarterly*, Summer 1999.

¹⁰Thomas Friedman, *The Lexus and the Olive Tree: Understanding Globalization*. (New York: Farrar, Straus, Giroux, 1999), 7.

¹¹*Ibid.*

¹²*Ibid.*, 8.

¹³Francis Fukayama, *The End of History and the Last Man* (New York: Free Press, 1992). For his most recent commentary, see “Second Thoughts: The Last Man in a Bottle,” *The National Interest* 56 (Summer 1999): 16-33, and commentary following.

¹⁴Michael J. Mazarr, *Global Trends 2005: The Challenge of a New Millennium* (Washington: CSIS, 1997), 13-14.

¹⁵Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies* (New York: W. W. Norton, 1998).

¹⁶Dale F. Eickelman, "The Coming Transformation of the Muslim World," *Foreign Policy Research Institute WIRE* 7, no. 9, (August 1999); see also Barbara Crossette, "Out of Control: The Internet Changes Dictatorship's Rules," *The New York Times Week in Review*, 1 August 1999, 1 and 16.

¹⁷Fareed Zakaria, "Is This the End of Inflation?" *Newsweek* (19 March 2001), 39.

¹⁸Robert Keohane and Joseph Nye, *Power and Interdependence* (New York: Addison-Wesley, 1989).

¹⁹Mazaar, 14.

²⁰Friedman, 11.

²¹For one recent argument which supports this point, see Carla Anne Robbins, "To All but Americans, Kosovo War Appears A Major U.S. Victory," *The Wall Street Journal*, 6 July 1999, A1 and A8.

²²The author is grateful to MAJ Chuck Hensley, U.S. Army, for emphasizing this point.

²³Friedman, 11-12.

²⁴Fareed Zakaria, "Is This the End of Inflation?" *Newsweek* (19 March 2001), 39.

²⁵National Intelligence Council, *Global Trends 2015: A Dialogue About the Future with Nongovernmental Experts* (Washington: Government Printing Office, 2001).

²⁶*Ibid.*

²⁷*Ibid.*

²⁸*Ibid.*

²⁹*Ibid.*

³⁰Hamish McRae, *The World in 2020: Power, Culture, and Prosperity* (Boston: Harvard Business School Press, 1994).

³¹National Defense University, *Strategic Assessment 1998: Engaging Power for Peace* (Washington: NDU Press, 1998).

³²Bob Walz, of the U.S. Army Command and General Staff College's Department of Joint and Multinational Operations, suggests that three tiers better describe the world of today: developed, developing, and failing. Failing states are the most likely source of asymmetric threats; he notes the case of South Africa under apartheid, which developed nuclear weapons in part because it was excluded from the developing world. The author is grateful to him for this point.

³³National Defense University, *Strategic Assessment 1998: Engaging Power for Peace* (Washington: NDU Press, 1998).

³⁴*Ibid.*

³⁵Blaine Harden, "In Provincial Town, a Chorus of 'No' to Milosevich." *The New York Times*, 7 July 1999, A1 and A12.

³⁶Daniel Yergin and Joseph Stanislaw, *The Commanding Heights: The Battle Between Government and the Marketplace that is Remaking the Modern World* (New York: Simon & Schuster, 1998), 382-387.

³⁷Elaine Sciolino, "Shadow Drama in Iran: For Once, the Veil that Hides Conflict Slips," *The New York Times Week in Review*, 18 July 1999, 5.

³⁸The author is grateful to Dr. Sam Gregg of the Centre for Independent Studies for insights into these groups and their motivations.

³⁹Ralph Peters, "Fighting for the Future," *The Washington Post*, 7 March 1999, B01.

CHAPTER 4

ASYMMETRIC ENDS, WAYS, AND MEANS IN 2010

We want to shape a stable and secure world order, and we are faced with a multitude of problems, disorder, conflicts, unstable governments, ethnic savagery, nuclear proliferation, use or threatened use of chemical and biological weapons, state-sponsored terrorism.²

General Andrew J. Goodpaster, *National Defense into the 21st Century*

The first chapter divided asymmetric warfare into ends, ways, and means. After the second chapter of the thesis discussed the research methodology and origins of this thesis, the third chapter drew conclusions about the shape of the world in 2010 from a review of international relations and “futurist” literature. It is now time to put the two pieces together to examine asymmetric warfare ten years from now, again using the technique of ends, ways, and means. While there are a vast number--indeed, given the definition of the term, an infinite number--of asymmetric threats that may confront U.S. national security in the year 2010, they may be usefully grouped into asymmetries in ends, asymmetries in ways, and asymmetries in means. This chapter will deal with them in reverse order, beginning with means of warfare that can be used asymmetrically, then thinking about ways of using force asymmetrically before focusing on perhaps the most important piece of the puzzle: the ends, or reasons why state and nonstate groups might desire to attack the West.

Means: Weapons of Mass Destruction as an Asymmetric Threat

Former Secretary of Defense William Cohen was among those concerned with the threat imposed by weapons of mass destruction even before the attack on the Cole demonstrated American vulnerabilities so clearly. “As the new millennium approaches, the United States faces a heightened prospect that regional aggressors, third-rate armies, terrorist cells, and even religious cults will wield disproportionate power by using--or even threatening to use--nuclear, biological, or chemical weapons against our troops in the field and our people at home.”³ He is supported in this fear by the Deutch Commission, which recently stated that weapons of mass destruction

pose a grave threat to the United States and to our military forces and our vital interests abroad. The most serious threats are:

- Terrorist use of weapons of mass destruction against the United States or its allies;
- Possession of, and the manufacturing infrastructure for, WMD by Iran, Iraq, North Korea, or other unfriendly states;
- Diversion of WMD-related weapons, technology, materials, and expertise from Russia;
- Transfer of nuclear, chemical, and biological weapons, delivery means, and technology by China; and
- Destabilizing consequences of WMD programs in the Middle East, South Asia, and East Asia.”⁴

The globalized world makes this concern even more serious:

In the core countries, and more and more over the globe, economies and infrastructure are increasingly integrated and people move more or less freely across borders. Mischief initiated in one place thus can now ripple across oceans and continents (e.g., an attack on information systems in the United States could be felt in Europe and Asia). This increased vulnerability magnifies the power of nonstate actors, making cooperation among the core countries against potential threats more desirable than ever.⁵

Paul J. Smith cites five broad categories of transnational challenges that pose the greatest threats to human security, national governance, and ultimately international stability: transnational crime, transnational terrorism, international migration flows, disease and international pandemics, and global environmental degradation and climate change.⁶

One of the key threats will be the nuclear, biological, and chemical weapons that are left over from the Cold War, particularly those in the uncertain hands of the Russian military. According to Leon Sloss of the National Defense University's Institute for National Strategic Studies, the Russians retain thousands of nonstrategic nuclear weapons. Lax Russian control over the weapons and the resulting fear of accidents and of leakage to third parties alarm many observers.⁷ As one scholar notes, "The Cold War is over, but the triple threat of chemical, biological, and nuclear proliferation will be with us for a long time to come."⁸ The subtitle of Ken Alibek's *Biohazard*--"The chilling true story of the largest covert biological weapons program in the world--told from inside by the man who ran it"--is an accurate depiction of the threat posed by Russian stockpiles and easily transferable scientific knowledge of biological weaponry.⁹ The problem goes far beyond Russia; Laurie Garrett reports that "the following nations possess biological weapons: Iraq, Iran, Syria, Libya, China, North Korea, Russia, Israel, Taiwan, and possibly Sudan, India, Pakistan, and Kazakhstan."¹⁰ Three prominent defense experts make the point starkly: "The danger of weapons of mass destruction being used against America and its allies is greater now than at any time since the Cuban missile crisis of 1962."¹¹

Terrorist groups are already using weapons of mass destruction in pursuit of their goals; fortunately, most attempts so far have failed to achieve their full, horrifying potential. The World Trade Center bombing of 1995, in which terrorists used a fertilizer and diesel fuel truck bomb in an attempt to kill 60,000 people, is one example; the Sarin gas attacks on the Tokyo subway system by a cult in March 1995 that killed a dozen people and injured thousands are another.¹² Paul J. Smith notes the recent trend toward terrorist use of “large-scale violence for its own sake,” arguing that “the specter of biological or chemical weapons being used in terrorist attacks substantially raises the possibility of widespread human and social destruction.”¹³ Laurie Garrett goes further: “According to intelligence sources in Europe and the United States, militant political groups across the globe are now developing or seeking to purchase biological weapons for terrorist use.”¹⁴

Cyberwar as a Weapon of Mass *Disruption*

In addition to the threat of terrorist use of weapons of mass destruction, the U.S. must also be aware of terrorist attacks upon its information infrastructure, including through offensive use of computers, or “cyberwar.” This is another threat that confronts the U.S. now.¹⁵ U.S. State Department counterterrorism officer Tom Hastings recently recalled the Chairman of the Joint Chiefs’ no-notice exercise in May of 1997, during which “hackers” employed by the Department of Defense enjoyed great success breaking into the classified “SIPRINET” computer network.¹⁶ Information attacks are in many ways a terrorist’s dream weapon; a recent RAND study noted that, “Unlike traditional weapons technologies, development of information-based techniques does not require

sizable financial resources or state sponsorship. Information systems expertise and access to important networks may be the only prerequisites.”¹⁷

Notes information warfare expert and U.S. Air Force Lieutenant Colonel Greg Rattray:

While the benefits from an interconnected global information society are numerous, vulnerabilities to information infrastructure have been created that threaten the well-being and security of states and societies. Existing international mechanisms and laws do not satisfactorily deal with problem, not do they create enforceable norms of behavior regarding use or disruption of the global information infrastructure.¹⁸

The emerging international environment poses increased dangers of nonstate and substate actors using new technologies to strike an increasingly vulnerable West. By 2010, there may be more than the current seven states in possession of nuclear weapons, a fact that is disturbing enough. Worse, it does not require the substantial infrastructure of a modern state to produce chemical, biological, and information weapons, so the number of actors in the international system with access to them may range from the low hundreds to the tens of thousands, include numerous nonstate actors. The internet provides ease of access to information on all of these weapons, on how to produce them, on where to acquire the raw materials to do so, and on the most effective way to employ them to maximize their effects. The barriers to production of information weapons, in particular, are almost nonexistent, while their potential to inflict potentially crippling damage on a highly technologically developed state like the US is incredible. Means of delivery of these weapons are also depressingly simple to produce, ranging from internet modems to aerosol cans; recent news reports have described the conversion of common propane fuel cylinders into inaccurate, but devastatingly effective ground-attack

missiles.¹⁹ The means to attack the US asymmetrically will be available to all states and to any nonstate actor with the desire to do harm to the nation that will lead the world in 2010. Figure 3 summarizes the WMD threat in 2010.

	Nuclear	Chemical	Biological	Cyberspace
Number of Participants	P5 + 2 + ?	100's	100's	10,000+?
R&D Limits	ABM Treaty, CTBT	No Testing	Testing Limits	None
Production/Storage	Declarations, Limits,	Ban	Ban	
Deployment	Launcher Limits			
Testing	Warhead Limits	Ban	Ban	
Use	Legal	1993 Ban	1972 Ban	
Barriers to Entry	High	Moderate	Low	Very Low
Offense	Dominant	Limited Military Effectiveness	Dominant	Dynamic
Defense	Very Difficult	Dominant	Difficult	Dynamic
Verification	Relatively Easy	Difficult	More Difficult	Very Difficult
Dual Purpose	Low	High	High	Very High
Role of Non-State Actors	Low	Moderate	High	Very High

Figure 3: The WMD Threat in 2010

Despite their undeniable ability to grab the headlines, it is possible to overstate the danger posed by weapons of mass destruction, and hence to neglect the other means future adversaries might use to accomplish their objectives while denying the United States the ability to achieve its goals at a reasonable cost. For instance, today the United States is largely dependent upon ports and airfields to project its military power throughout the globe. Enemies that could deny the United States access to ports and airfields in important regions of the world--whether through weapon of mass destruction strikes upon them or, perhaps even more difficult to deter, through mine or other conventional forms of warfare--could achieve an advantage over the United States out of all proportion to the cost required. Using conventional means in a conventional manner can have an asymmetric effect upon a superpower enemy.

Indian Brigadier V.K. Nair has provided just such a perspective in his analysis of the Persian Gulf War of 1990-91. He discusses the “strategic issues that are relevant to an armed conflict between two asymmetrical powers as was the case in the Gulf War” through the specific example of the asymmetric points of vulnerability the United States would face in a similar power-projection role with reference to a conflict in India. Nair notes that American force projection over the open sea would be vulnerable to commerce raiders, minefields, and submarines; that missile technology could protect India’s shorelines from any amphibious or maritime power-projection threat; and that air defenses could raise the cost of American air attacks to unsustainable levels. Describing America’s “Achilles heel” as the need for host country facilities from which to deploy her power, Nair instructs that India “needs to study the vulnerabilities” of U.S. forces, as “scope exists for low cost options to significantly reduce the combat potential” of U.S.

forces operating against India if the South Asian country takes advantage of all of the asymmetries inherent in the relationship between a Third World power and a superpower. The book is chilling reading.²⁰

Ways: Using “Conventional” Means Asymmetrically

Former United States European Command Commander General David Maddox noted several years ago that: “If a future foe understands the Cold War capabilities inherent in the U.S. armed forces of today, they can develop asymmetric counters. A future foe does not need to be a ‘peer competitor’ to achieve technological superiority in specific--perhaps in narrow--areas that could prove pivotal in a given situation.”²¹

General Maddox overstates the difficulty America’s prospective enemy faces; he need not achieve technical superiority in even a narrow field to defeat the United States.

General Maddox himself fought against the North Vietnamese, who were unable to achieve technical superiority in any area over the United States, but triumphed through inferior conventional technology used in asymmetric ways to achieve an end in which they very strongly believed. While the United States continues to focus on technological solutions to problems and on emerging threats based on emerging technologies, the more dangerous concern should be the use of existing technology against it in ways that it is unable to predict and cannot defeat.

Charles J. Dunlap Jr. suggests “the potential asymmetrical vulnerabilities about which the West should be concerned are not so much technological as the Western mindset believes (and even prefers), but rather are those that turn the fundamentals of the

West's culture and political system against itself."²² America's democratic political system and the adherence of Western forces to the laws of land warfare are both vulnerabilities as well as strengths to those willing to exploit them, and the U.S. has already seen that there are those willing to do so. The United States cannot abandon its ethical principles in the fight to increase democracy and freedom in the world, and this paper does not suggest that it do so. It does suggest that the U.S. carefully evaluate what it often considers to be its greatest strengths from the perspective of an opponent unable to challenge the United States conventionally, but nonetheless determined to pay whatever price is necessary to achieve its ends.

The basis of Western democracy is the value of the individual, but this very strength provides an increasingly important way for those who would do harm to the United States in an effort to change its policies--or merely as an act of revenge--to accomplish both objectives. There is an evolving trend toward reduced willingness to accept casualties among Western military forces--and Western publics in general. Although this author remains convinced that the American public is willing to accept military casualties given decisive national-level civilian leadership in foreign policy and the creation of a national consensus that American intervention abroad does further American national interests, he also concedes that such leadership may be hard to come by for the indefinite future.²³ Its absence may further increase the likelihood of the United States being held hostage by asymmetric threats from societies that will take advantage of its greatest relative weakness. The US Army Training and Doctrine Command suggests that in the future, "Most operations against the U.S. will be force

oriented [and] focused at our *universally perceived strategic center of gravity*--mass casualties and the resultant effect on our national resolve.”²⁴

This was the foundation of Saddam Hussein’s strategy in the Persian Gulf War; he is quoted as saying, “I hold this view by looking at the geography and nature of American society. . . . yours is a society which cannot accept 10,000 dead in one battle.”²⁵ Indian Brigadier Nair explains Hussein’s otherwise inexplicable decision to defend Kuwait against an American-led coalition as a result of Hussein’s belief that he gained a decisive advantage over the United States because of his asymmetric willingness to accept casualties. By promising to shower the United States in body bags, Hussein believed that he could deter an Allied attack and ultimately outwait the will of Coalition partners; patience may be another asymmetric advantage of future enemies of the United States.²⁶

A 1997 interview with Osama Bin Laden, perhaps the most dangerous terrorist in the world today,²⁷ showed that the perception of casualty aversion as an asymmetric point of attack for threats is deeply ingrained. Bin Laden stated:

One day our men shot down an American helicopter. The pilot got out. We caught him, tied his legs and dragged him through the streets. After that 28,000 U.S. soldiers fled Somalia. The Americans are cowards. We made it clear to the world that we will not let America’s new world order work. . . . But the Americans are afraid of death. They are like little mice. If Russia can be destroyed, the United States can also be beheaded.²⁸

The asymmetric American willingness to accept casualties is not limited to American soldiers. The West is very concerned with limiting casualties to civilians in military interventions and is even concerned with losses to enemy combatants.²⁹ While much of this paper concentrates on some of the most horrific asymmetries imaginable--

threat use of weapons of mass destruction against American forces or American civilians-
-it is important to remember that the basis of the effectiveness of these attacks is an asymmetrical value the adversaries place on the strategic ends being sought and on the relative value of human life. This asymmetry is also, perhaps, the most difficult to overcome of all the asymmetrical advantages available to America's adversaries, for it is so alien to the American way of life that it is literally almost unthinkable for U.S. planners.³⁰

That fact is itself an asymmetric point of vulnerability open to exploitation by those who would do America harm; then Secretary of Defense William Cohen decided not to punish the captain and crew of the USS *Cole* because the entire military chain of command was responsible for allowing "clever, committed terrorists" to exploit vulnerabilities in U.S. security. "We were not complacent, but the terrorists found new opportunities before we found new protections."³¹

Ends

While most attention has been focused on the ways and especially on the means by which the United States might be attacked asymmetrically, perhaps the more important asymmetries are those in ends and in non-technology-based means to counter American technological advantages. Given the proclivities of modern Western societies, it is unsurprising that we focus on technological and organizational ways and means that our foes may use in an attempt to overcome our apparent organizational and technological advantages over them. This thesis suggests, however, that it is by focusing on the ends sought by those who would do us harm--ends that we may find it difficult to

understand rationally--that the United States can most profitably prepare itself to deter and defend against the asymmetric threat.

The story begins with economics. Despite the West's best efforts, the rising tide of economic progress the world is currently enjoying will not lift all boats. Those who do not want or are unable to join the globalized world will almost invariably blame the United States as the point of origin of much of the structure and content of the new world order. Those who are left behind--both internationally and in the United States--will have a real desire to damage or destroy the system. As Michael Mazaar notes, "Coping with change is never easy; coping with the sort of accelerated, comprehensive change that we face today could turn out to be the severest test that history has ever imposed on human psychology."³² Many who fail that test will take out their resentment on America. In the words of David Kay, "The United States has overwhelming power in the world and we're going to remain overwhelming. There is a body of resentment that is going to increase because of who we are. That resentment is a reservoir and breeding ground for terrorist organizations."³³

That resentment has increased since the end of the Cold War. When the United States faced the conventional, symmetrical challenge of the Soviet Union, it was not perceived as a global threat to Third World countries and the way of life of their people; they could understand the absolute nature of the conflict between the two superpowers and the resulting need for overwhelming American military and economic power. In the wake of the Soviet Union's collapse, however, resentment against the United States has increased even as its power differential over the rest of the world has exploded. As the web site STRATFOR has noted, "The existence of a single, overwhelming power must

generate a psychological reaction. The very power generates fear and resentment...Anti-Americanism is not ultimately ideological; it is an unavoidable reflex against overwhelming power. . . . It is an anger that should not be dismissed lightly.”³⁴ It is ironic that many of those who resent the United States desperately wish themselves to become American; however, the fact that their ambition is denied can turn them to attempt to damage or destroy that which they simultaneously admire and hate.³⁵ Nobody said that psychology was simple.

The case of Osama bin Laden’s *Al Qaeda* terrorist network is instructive. The Afghanistan-based Islamic terrorist is at the center of a loose network of like-minded insurgents who circle the globe from the West Bank to Indonesia and Chechnya. All are determined to overthrow the United States in a holy war. Two *Newsweek* reporters speculate that “as long as Pax Americana continues--and that is likely to be a long time--they may all be united in their resistance to it. They see American power everywhere--in their politics, economics, culture, and daily lives--and they resent it deeply.”³⁶ Because of the very globalized world they deplore, these disenchanted and apparently disenfranchised denizens of the second tier have the ability to attack America at many points of vulnerability; globalization is both cause of resentment and source of power to do harm, rationally or irrationally according to Western perspectives.

These motivations to attack the United States, which is often seen as the source of the destruction of local societies, can lead to profoundly deep-seated desires to pay any cost to harm the United States. The warriors who died in extraordinary numbers on behalf of the *Habr Gidr* clan led by Mohamed Farrah Aidid on the streets of Mogadishu, Somalia on 3 October 1993 were waging total war against an American Army that was

not prepared to pay the price that total war requires.³⁷ As the US Army Training and Doctrine Command recently noted, “What the U.S. and its allies may view as small-scale contingencies or stability and support operations, the threat may view as nothing short of war to be won at all costs.”³⁸ This basic discrepancy in the value each side to a struggle attaches to winning can be the most difficult asymmetry to overcome; the United States struggled for over a decade to convince the North Vietnamese and Viet Cong that it cared more about the future government of South Vietnam than did they. Ultimately, the United States had to concede that North Vietnam was in fact willing to pay a much higher price to impose its form of government on South Vietnam than the United States was to create a democratic government there. That the United States cared at all about South Vietnam was largely a function of the Cold War struggle between the US and the Soviet Union; with that war won, it increasingly appears that the United States is unwilling to pay a very high price to impose its will in many parts of the world. Threats know, and some will take advantage of, that fact.

Summary

This chapter has evaluated the potential threats to U.S. national security from asymmetric ends, ways, and means in the year 2010, finding a disturbing prospect that the United States is far more likely to face asymmetrical threats than it was just fifteen years ago. The proliferation of access to technology spawned by globalization provides increased access to asymmetric ways and means of striking the United States.

Globalization also ferments popular discontent and anger at the U.S., in some cases creating a desire to bear heavy costs to damage the leader of globalization. This is an

unpalatable combination. John Gannon, the assistant director of central intelligence for analysis and production at the National Intelligence Council, noted on 4 January 2001:

For those countries on the wrong side of the economic and digital divide, there will be alienation and disaffection, felt not just in countries but in non-state groups as well. They will have access to information and technology and finance that will enable them to act on their discontent through violence, terrorism and weapons of mass destruction.³⁹

This paper now turns to an examination of ways to increase U.S. security in the face of these increasingly pressing asymmetric threats.

40

1

²Cited in Earl H. Tilford, Jr., *National Defense into the 21st Century: Defining the Issues* (Carlisle, PA: US Army War College Strategic Studies Institute, 6 June 1997), 48-49.

³William Cohen, *Proliferation: Threat and Response* (Washington, D.C.: Office of the Secretary of Defense, November 1997), iii.

⁴*Report of the Commission to Assess the Organization of the Federal Government to Combat the Proliferation of Weapons of Mass Destruction ("The Deutch Commission")*, available from www.senate.gov/~specter/11910book.pdf; Internet.

⁵National Defense University, *Strategic Assessment 1998: Engaging Power for Peace* (Washington: NDU Press, 1998).

⁶Paul J. Smith, "Transnational Security Threats and State Survival: A Role for the Military?" *Parameters* 30, no. 3 (Autumn 2000).

⁷Leon Sloss, "The Current Nuclear Dialogue," *Strategic Forum* 156 (January 1999). Washington, D.C.: National Defense University Institute for National Strategic Studies, p.4. See also Rensselaer W. Lee III, *Smuggling Armageddon: The Nuclear Black Market in the Former Soviet Union*, and William J. Broad, "Finding Penance in Going Public About Making Germs into Bullets," *The New York Times Week in Review*, 27 June 1999, 7. Russian political analyst and Carnegie Fellow Lilia Shevtsova confirmed the severity of these concerns among Russians in an interview at West Point on 24 September 1999. See her *Yeltsin's Russia* (Washington, D.C.: Carnegie Endowment, 1999).

⁸Allan S. Krass, *The United States and Arms Control: The Challenge of Leadership* (Westport, CT: Greenwood Press, 1997), 205.

⁹Ken Alibek, with Stephen Handelman, *Biohazard* (New York: Delta, 1999).

¹⁰Laurie Garrett, "The Nightmare of Bioterrorism," *Foreign Affairs* 80, no. 1 (January-February 2001): 76.

¹¹Ashton Carter, John Deutch, and Philip Zelikow, "Catastrophic Terrorism: Tackling the New Danger," *Foreign Affairs* 77, no. 6 (November-December 1998): 81.

¹²BBC News, "Biological and Chemical Warfare--A Modern-Day Threat" (21 February 1998), available from www.news6.thdo.bbc.co.uk/hi/English/world/newsid_58000/58511.stm; Internet.

¹³Paul J. Smith, "Transnational Security Threats and State Survival: A Role for the Military?" *Parameters* 30, no. 3 (Autumn 2000).

¹⁴Garrett, 76.

¹⁵John A. Serabian Jr., "Statement for the Record before the Joint Economic Committee on Cyber Threats and the U.S. Economy" (23 February 2000), available from www.cia.gov/cia/public_affairs/speeches/cyberthreats_022300.html; Internet.

¹⁶Tom Hastings, at the National Defense University/INSS Terrorism Conference, 28 July 1999.

¹⁷Roger C. Molander, Andrew S. Riddle and Peter A. Wilson, *Strategic Information Warfare: A New Face of War* (Washington, D.C.: RAND, 1996): 15. Available online from www.rand.org/publications/MR/MR661/MR661.pdf; Internet.

¹⁸Greg Rattray, "The Emerging Global Information Infrastructure and National Security," *The Fletcher Forum of World Affairs* 21, no. 2 (Summer-Fall 1997), 97.

¹⁹Jared Kotler, "Guerrillas to Study Curbing the Use of Terrifying Homemade Missiles," *Fort Worth Star-Telegram* (13 February 2001), A3.

²⁰V.K. Nair, *War in the Gulf: Lessons for the Third World* (New Delhi: Lancer International, 1991), 217-231.

²¹General David Maddox in Earl H. Tilford Jr., ed., *National Defense into the 21st Century: Defining the Issues* (Carlisle, PA: US Army War College Strategic Studies Institute, 6 June 1997), 18.

²²“Preliminary Observations: Asymmetrical Warfare and the Western Mindset,” in Lloyd J. Matthews, ed. *Challenging the United States Symmetrically and Asymmetrically: Can America Be Defeated?* (Carlisle, PA: U.S. Army War College, 1998), 6-7.

²³Don M. Snider, John A. Nagl, and Tony Pfaff, *Army Professionalism, the Military Ethic, and Officership in the 21st Century* (Carlisle Barracks, PA: U.S. Army War College Strategic Studies Institute, 1999).

²⁴U.S. Army Training and Doctrine Command, *Future Operational and Threat Environment: A View of the World in 2015*. (FT Monroe, Virginia: U.S. Army Training and Doctrine Command, 12 April 2000), 13. Emphasis added.

²⁵Hussein is referring to the Battle of Fao during the Iran-Iraq War. V.K. Nair, *War in the Gulf: Lessons for the Third World* (New Delhi: Lancer International, 1991), 32.

²⁶*Ibid.*, 35.

²⁷George J. Tenet, “The Worldwide Threat in 2000: Global Realities of Our National Security” (21 March 2000), available from www.cia.gov/cia/public_affairs/speeches/dci_speech_032100.html; Internet.

²⁸Osama Bin Laden interview by Hamid Mir in Jalalabad, Pakistan, in Urdu, 18 March 1997. Cited in U.S. Army Training and Doctrine Command, *The Operational Environment* (Fort Monroe, VA: USA TRADOC, 2 February 00), Appendix A.

²⁹For evidence that concern with excessive Iraqi casualties led to a premature end to the 1991 Persian Gulf War, see Rick Atkinson, *Crusade: The Untold Story of the Persian Gulf War* (New York: Houghton Mifflin, 1994).

³⁰Max Boot, “Will Bush Bury Bodybag Syndrome?” *The Wall Street Journal*, 11 September 2000, A1.

³¹“No punishment planned for Cole’s captain, crew,” *The Kansas City Star*, 20 January 2001, A5.

³²Mazaar, 32-33.

³³David A. Kay, Center for Counterterrorism and Analysis, SAIC, at the INSS “Terrorism and U.S. National Security” Conference, National Defense University, 28 July 1999. The point is reinforced in Dana Priest, “An Engagement In 10 Time Zones,” *The Washington Post*, 29 September 2000, 1.

³⁴“The Geopolitics of Fidel,” STATFOR Global Intelligence Update (10 April 2000), available at www.stratfor.com/SERVICES/giu2000/0410000.A; Internet.

³⁵Ibid.

³⁶Christopher Dickey and Carla Power, “A Spreading Islamic Fire,” *Newsweek* (19 February 2001), 37.

³⁷See Mark Bowden, *Black Hawk Down: A Story of Modern War* (New York: Atlantic Monthly Press, 1999) for a gripping account of the battle, which cost the lives of eighteen Americans and an estimated one thousand Somalis. The truly important lesson of this battle for future conflicts in which the United States may become engaged is the answer to the question of why the Somalis decided to stand and fight the United States in a battle which they knew they would lose decisively at the tactical level of war; this author knows of no analysis of that question.

³⁸U.S. Army Training and Doctrine Command, *Future Operational and Threat Environment: A View of the World in 2015*. (FT Monroe, Virginia: U.S. Army Training and Doctrine Command, 12 April 2000), 18.

³⁹“Analysts Forecast Threats Against the United States,” *Kansas City Star*, 5 January 2001, A3.

CHAPTER 5

CONCLUSION: CREATING A CONSENSUS ON CHANGE

No sane individual, or nation led by rational leaders, would challenge the United States on this nation's terms, which means that the armed forces must be prepared to counter asymmetrical strategies. The old style of deterrence simply will not work in this complex world.¹

Frederick L. Frostic, *National Defense into the 21st Century*

This paper has argued that the end of the Cold War has dramatically changed the national security equation for the United States. An increasingly globalized world is likely to present far fewer symmetrical national security challenges to countries in Donald Snow's "First Tier" of industrialized, democratic countries; instead, many challengers will come from the "Second Tier" of nonindustrialized, nondemocratic states, or even from nonstate actors. These actors are far more likely to use asymmetric ends, ways, and means to challenge the United States in 2010.

Given this vision of the future, perhaps the most serious asymmetric threat to U.S. national security is the organizational culture of the Department of Defense and of its component services. Accustomed to mirror-imaging and to creating a national security apparatus to defeat the threats which we see and understand, the Department of Defense continues to be held in thrall to the Iron Triangle of Congress, the Services, and the defense industry, devoting resources to countering future symmetrical threats which we already overmatch while devoting insufficient resources to emerging asymmetrical threats. As Don M. Snider has noted, "While the world situation has changed, the

strategic challenges facing the nation are not being addressed very differently from the Cold War.”²

A recent doctoral dissertation supports Dr. Snider’s claim that the Department of Defense has not yet adapted to the demands of the post-Cold War world. Richard Lacquement argues in *Preaching After the Devil’s Death: Shaping American Military Capabilities in the Post-Cold War Era*³ that almost a decade after the collapse of the Soviet Union, the force structure and doctrine of United States armed forces have changed very little. He suggests that the explanation for this lack of restructuring is relatively simple and somewhat unsurprising: The military leadership of the United States’ armed forces have been united in their support for incremental reduction of the armed forces while avoiding dramatic changes to doctrine or force structure. Lacquement perceives this as a negative outcome because such Cold War forces are not well designed for use in the many peace operations that have been more common in the post-Cold War era and because the failure to adequately adapt force structure and doctrine means that United States armed forces may be largely unprepared for the next war.⁴

Lacquement’s work does not suggest that the process of adapting to the dramatic change in the international system will be an easy one for the Department of Defense. In fact, there is a growing field of literature on the subject of organizational innovation in military institutions. It variously credits institutional reformers from within the military, political leadership from outside the military, or a combination of the two as responsible for implementing significant change in military organizations. All of the literature does agree that military organizations, because of their hierarchical nature, established career

paths, and the grave consequences of adapting incorrectly to changes in warfare or in the international system, are very resistant to change.⁵ The current author has suggested that military organizations find it easier to adapt in directions that lie in line with their institutional culture;⁶ the United States military, for instance, is far more likely to adopt technological changes in the way it fights than it is to rethink its traditional post-Civil War focus on conventional force-on-force warfare.⁷

Despite the difficulty of the process, the Department of Defense must change its pattern of thinking about the future of conflict and the nature of the threats it will face in the next century. It is largely uninterested in the new old warfare of insurgency and terrorism, even if those old campaigns are now being waged with new weapons of war. It must begin to prepare itself now, to make itself a harder target to hit and to increase its ability to hit back, preemptively if possible, at those individuals and rogue states that would do it harm.⁸ There are several fairly simple organizational changes that would be steps in the direction of making our national security structure more effective in deterring and responding to the asymmetric threats we will face in the next century. The administration of George W. Bush is currently rethinking America's conventional and nuclear force structure in light of the threats the nation faces at the dawn of a new century, and this paper will suggest directions for those changes before considering broader issues of policy. These include changes in the Cooperative Threat Reduction Program, the creation of a Cabinet secretary for Counterproliferation, increased focus on arms-control agreements, and a "No First Use of Weapons of Mass Destruction" pledge. Changes should also be made outside the Department of Defense; many of the challenges to U.S. national security in 2010 will be bred by disease, economic decay, and lack of

opportunity in countries around the world. Helping those countries develop toward membership in the First Tier will increase their sense of hope, and that of their people, and decrease the chances that they will attempt to destroy the entire international system.

This paper will now present its suggestions for change in national strategy, in several of the policy areas that support that national strategy, and finally in the Department of Defense itself in order to better prepare the United States for the asymmetric threats it will face in the world of 2010.

A Two-Tiered Strategy for an Asymmetric World

The globalized world of 2010 will resemble the world of today to a great extent. The United States will remain the world's dominant power, and both democracy and free markets will continue to flourish. Those countries that struggle with democracy, or remain trapped in autocratic dictatorships, will continue to present threats to the national interests of the U.S., and we will have to maintain superior conventional forces to deter those countries from using force symmetrically against our friends or us. Dr. William T. Johnsen, of the US Army War College's Strategic Studies Institute, suggested in early 1997 that the United States adopt a preventive defense concept, a three-tiered strategy of preventing threats from emerging, deterring risks that arise, and compelling adversaries as necessary when their interests do not correspond with those of the United States. According to this strategy, military power will be used to promote, as well as protect, American national interests.⁹

This "Prevent, Deter, and Compel" strategy is a good way to deal with the state actors that will present national security risks to the United States over the next decade. It must be paired with a recognition that nonstate and substate actors have the potential to

present serious asymmetrical threats to U.S. national security, and that these actors are far harder to deter or compel. The focus of American asymmetric threat strategy must therefore be upon preventing these threats from acquiring the ends, ways, and means to asymmetrically challenge the United States and its friends. This will be a difficult task, requiring more focus on international developmental aid to provide hope to those now being left behind, more international cooperation to prevent states from harboring known terrorists and to jointly bring them to justice, and more interagency cooperation and focus on ridding the world of potential means for inflicting mass casualties on American armed forces or the American population. These are heady tasks, but they are problems we must begin to grapple with, lest we find ourselves hit where we do not expect to be.

Policy Recommendations

In addition to changing American strategy to prevent and deter threats and compel other states to take actions in accordance with American interests, this paper also suggests a number of policy changes to further diminish the nation's vulnerability to asymmetric threats over the next ten years. These include changes in the Cooperative Threat Reduction Program, the creation of a Cabinet secretary for Counterproliferation, increased focus on arms-control agreements, and deep and possibly unilateral cuts in the American nuclear weapons arsenal.

The Cooperative Threat Reduction Program is a good beginning that should be strengthened.¹⁰ Not enough resources are currently being devoted to this program; far more could be done to reduce the dangers inherent in unguarded weapons of mass destruction and unemployed scientists with knowledge of how to build them, all for sale to the highest bidder. As Bill Perry and Ashton Carter note, "Without a forceful

‘reinvented’ effort at cooperative programs like Nunn-Lugar, and a clear new direction for arms control, terror might again return to the headlines.”¹¹ Senator J. Robert Kerrey’s recent attempt to reduce American nuclear stockpiles as part of the fiscal year 2000 National Defense Authorization Bill, though defeated in the Senate, is one example of a good place to start.¹²

Senator Kerrey suggested using the money saved by decreasing America’s unnecessary stockpile of nuclear weapons to improve America’s intelligence operations. Given the dispersed nature of the threats we will face, not just from states but also from nonstate and substate actors, the demands on intelligence collection and analysis will increase dramatically. There is a firewall in the intelligence system of today that separates responsibility for intelligence work inside the United States, currently given to the Federal Bureau of Investigation, from that for threats that emanate from outside our borders, currently apportioned to the Central Intelligence Agency. To ensure that the gray area between the two agencies is covered, Carter and Perry therefore propose the creation of a National Terrorism Intelligence Center, under the control of the FBI, which would “be responsible for collection, management, analysis, and dissemination of information and warning of suspected catastrophic terrorist acts.”¹³

The Commission to Assess the Organization of the Federal Government to Combat the Proliferation of Weapons of Mass Destruction, chaired by John M. Deutch, described current American organization for counterproliferation as “a Cold War structure for a post-Cold War mission.” The panel recommended the creation of a new cabinet secretary for counterproliferation, including the defense of cyberspace. Deutch was quoted as saying, “The Government must reorganize itself if it’s going to meet the

more dangerous proliferation threats we now face.”¹⁴ Ashton Carter, recent Assistant Secretary of Defense for International Security Policy, suggests that “to properly fight catastrophic terrorism requires a multi-year, multi-agency, presidentially approved and enforced plan to develop the capabilities (such as surveillance and detection, public health, and forensic measures) necessary to protect the country, while avoiding waste and safeguarding civil liberties.”¹⁵ His description of the tasks suggests the extent of the changes required, but also hints at the severity of the risk to the United States if those changes are not made soon.¹⁶

Arms control agreements may also be useful as a tool for controlling the proliferation of chemical, biological, and nuclear weapons to both state and non-state actors who might use them against us. The United States must examine arms control both from the perspective of creating norms which the majority of states will follow, and from the sure knowledge that there exist states which will not follow the regime, but will use it as cover behind which to develop banned capabilities. In some cases, the creation and maintenance of the norm may be worth the risk of rogue state cheating--but that is a decision that should be made each time an agreement is negotiated and verification and enforcement regimes are considered.¹⁷

Finally, the United States should make substantial cuts in its nuclear weapons, with or without corresponding cuts in the Russian arsenal. Several hundred nuclear warheads would deter as effectively as do several thousand the threats that the United States faces today, and U.S. leadership toward deep cuts would strengthen the creation of an international norm against the use of weapons of mass destruction.¹⁸ No less a national security authority than General Andrew J. Goodpaster stated a few years ago, “I

don't question that our nuclear capability will add an existential make-weight to whatever we can do conventionally, but I regard the arguments that we should rely on our nuclear capability as a cop-out." He advocates reducing our nuclear weapons at a rate of 2000 a year (about the same rate at which we built them) to the lowest mutually verifiable level of some hundreds.¹⁹

In addition to all of these changes in Defense policy must come a new emphasis on encouraging economic development in the less fortunate parts of the world--not out of any sense of obligation to humanity, but out of simple national self-interest. The United States Marine Corps had recognized by 1940 that "The motive in small wars is not material destruction. It is usually a project dealing with the social, economic, and political development of the people."²⁰ Today, the focus should not be on small wars, but on creating small circles of peace, and then on expanding those circles. Robert Kaplan's warnings about the future of instability--"follow the demographic group of unemployed young men to find the future of conflict"²¹--is one that we cannot afford to ignore, lest it (literally) blow up in our face.

Department of Defense Recommendations

In addition to the changes in national strategy and policy outlined above must come a number of changes within the Department of Defense. One of the first current shibboleths that must go is the two-Major Theater War (MTW) construct that currently guides the size and shape of American armed forces. Useful nearly a decade ago to preserve force structure in the wake of the Cold War--this author heard a U.S. Air Force Brigadier General at the Army War College Strategy Conference in May 1998 proclaim, "The two-MTW construct was a bayonet thrust into the wall to preserve a force structure

that was in free fall”--many commentators now suggest that the two-MTW force-sizing paradigm’s focus on possible conflicts in Korea and Iraq is outmoded or even counterproductive. Indeed, the National Defense Panel recently noted, “The two theater war construct has been a useful mechanism for determining what forces to retain as the Cold War came to a close. But it is fast becoming an inhibitor to reaching the capabilities we will need in the 2010-2020 time frame.”²²

This paper will suggest a feasible alternative to the two-MTW paradigm that will better prepare the United States for the largely asymmetric threats it is likely to face over the next ten years and beyond: a two-smaller-scale-contingency (SSC), one-and-a-half MTW, homeland-defense and transformation force sizing mechanism, or “SSMHDT” paradigm. While there are risks associated with this alternative, the greater risk is of not adapting to the changing threat environment of today and tomorrow. Strategists must not only find the proper relationship between ends and means but must also balance between current and future readiness. Accepting some risk today will decrease the danger in the more threatening years to come.

Two-MTW should be replaced with a two-smaller-scale-contingency, one-and-one half MTW, homeland-defense, transformation strategy, or “SSMHDT.” The acronym does not flow off the tongue as trippingly as “Two-MTW,” but as Michael O’Hanlon notes, “after a decade of the two-Desert-Storm jingle we have oversimplified force planning long enough.”²³

Two-SSC

The changes in the world order described in preceding chapters of this thesis have created vastly increased demands on U.S. forces to engage in operations lower on the

spectrum of conflict than MTW's. These missions, described here as "Operations Other Than War" (OOTW), are straining America's military forces today and promise to inexorably erode her military capability unless the Department of Defense takes steps to reconfigure its force structure to better meet the demands of the National Security Strategy of Engagement and Enlargement. The United States Army, the proponent for OOTW doctrine, currently adheres to the policy that all combat units are fully able to perform peacekeeping missions and that there is no need to create specialized peacekeeping units. This author disagrees with both contentions.

First, while combat units are able to perform peacekeeping missions to some degree, they are not organized, trained, nor equipped to do so, nor are their personnel selected for their aptitude in such missions. Instead, combat-ready units are disassembled and reshaped to perform peacekeeping missions in an *ad hoc* manner. Tank units serve as dismounted peacekeepers in Bosnia and Kosovo, leaving behind their tanks and neglecting their hard-won and perishable tank gunnery and maneuver skills to man checkpoints and perform dismounted patrols. While they perform these tasks reasonably well, it is unreasonable to expect that they understand the creation of a stable civil society as well as would peacekeeping troops selected, trained, and organized exclusively for those missions. It is also unreasonable to expect--as the Army currently does--these troops to perform six month peacekeeping tours and then retrain combat skills to the standards expected of troops on call to fight mid-intensity conflict, only to then retrain them on peacekeeping tasks prior to deploying them on another peacekeeping mission. The Army should create specialized constabulary force units, organized, trained, and equipped exclusively for peacekeeping duties.²⁴ Three divisions of such troops would be

sufficient to handle two long-term SSCs, and this mission should remain largely an Army responsibility.

One-and-a-Half MTW

The United States must maintain the ability to fight and win a major theater war, probably in the Middle East. The enemy has a vote in the second MTW; if a country with interests inimical to America's decides to take advantage of her vulnerability when she is already fully committed to a Major Theater War, the armed forces must have at least enough capability to stop the initial attack and hold it in check until they are able to swing forces from the first MTW to the second. This is not an appealing scenario; it assumes some risk, and is essentially a "Win-Hold-Win" option. Mobilizing the National Guard upon the buildup of hostilities for the first MTW could minimize risk. However, unless the American people are willing to spend substantially more than \$322 billion annually on defense, the U.S. will have to accept some risk as she prepares for the future, and the second MTW is the place to accept it.

Homeland Defense

Threats to the continental United States are increasing, from both domestic and international terrorist groups and because of the proliferation of WMD and missile technology to states that oppose our interests and activities in the world. The military has a role to play in deterring state attacks on CONUS and in responding to both state and nonstate actor assaults. This mission requires more attention and more resources than it has been given to date; the first WMD terrorist attack on U.S. soil will result in a plethora

of resources being devoted to this problem. This paper suggests that those resources be committed now.

Transformation

One of the central problems that confront strategists is not only knowing what to be ready for, but also when. The United States currently enjoys a remarkable power disparity over the rest of the world; it is clearly the dominant power and the National Intelligence Council predicts no peer nation until 2015 at the earliest. Given the limited resources this democracy has decided to devote to defense and security in that threat environment, it therefore makes sense to begin to prepare now for an uncertain future in which the correlation of power is unlikely to be as favorable as it is today. A substantial portion of America's defense budget should be devoted to recapitalizing the force and to leap-ahead technologies so that when we do face the real possibility of a peer competitor--in 2015 or later--we have already created many of the resources we will need. The Army is moving in the right direction with its more deployable but still lethal and protected Intermediate Brigades, but the other services should also begin their own Transformations. The Navy would be well advised to reconsider the arsenal ship and the Air Force the concept of unmanned fighter planes in an era of proliferating cheap missile technology. At the Joint level, America will need a functional integrated Space Command and a Cyberwar Command to defend against emerging dangers.

The current military force structure is not optimized for the demands of the post-Cold War world in which the United States is far more likely to be challenged

asymmetrically than symmetrically. The two-Major Theater War force-sizing mechanism has outlived its usefulness and is currently a detriment to the military's ability to adapt itself for the missions it is likely to face. Cascading changes in force structure inevitably result from a shift to a more realistic defense strategy instead of the current two-MTW policy. This paper will now consider the changes that naturally grow out of the above changes in national strategy, policy, and force-sizing paradigms in recognition of the threats the United States is likely to face to 2010 and beyond.

Force Structure

Richard Lacquement is not the only author who argues that although the world situation has changed since the demise of the Soviet threat, the military has not adapted as quickly. One-third smaller than it was in 1990 with a budget in real terms about 30 percent lower, the military is in many ways just a smaller, higher-technology version of the force that won the Cold War. It is also facing a budget shortfall significant enough to be described as a "Coming Train Wreck" as the weapons systems purchased during the Reagan defense buildup wear out and require replacement. The Congressional Budget Office estimates that the Department of Defense requires an additional thirty to fifty billion dollars a year to maintain its current force structure while procuring the weapons systems now on the books, even without any additional spending on a National Missile Defense system, the top defense priority of the new administration. Meanwhile, there is little support for a larger defense budget in Congress or in the American public at large, which prefers a tax cut to more spending on defense, and the scent of a recession is in the air. "Train wreck" may be too gentle a description of the coming funding crisis.

Holding the Line: U.S. Defense Alternatives for the Early 21st Century is a recent publication that analyzes the most proper Department of Defense force structure and organization given the threats the United States is likely to face in the post-Cold War World. Edited by Cindy Williams, until recently the leader of the National Security Division of the Congressional Budget Office, its thesis is that “stuck in the Cold War pattern of force structure, organization, equipment, and infrastructure, the U.S. military has frittered away a decade of opportunity to reshape itself for the future.”²⁵ *Holding the Line* suggests changes in each of those areas to allow the Department of Defense to adapt to its vision of the post-Cold War world while avoiding the coming budget train wreck; they are presented here in the interest of stirring debate about the American military’s proper response to the asymmetric threats it is most likely to face in the new world order.²⁶

Holding the Line breaks with tradition by suggesting force structure changes that would shift the balance of power among the three services. The current allocation of resources among the services, which has remained amazingly steady for the past thirty-five years at 25 percent for the Army, 31 percent for the Navy, and 25 percent for the Air Force, may no longer be appropriate in the post-Cold War world. Owen Cote, Karl Mueller, and James Quinlivan suggest strategies and force structures that respectively place more emphasis on the contributions of the Navy, Air Force, and Army to the future security needs of the United States. Their recommendations are presented here as useful straw men for the coming debate on how to reshape the uniformed services to meet the asymmetric security environment of 2010 and beyond. This paper does not suggest that these cuts in force structure are essential precursors to the adaptations required to make

the Department of Defense more effective in adapting to asymmetric threats; however, it does think that some changes in conventional force structure, perhaps of this nature, are very likely between now and 2010. Adaptation to asymmetric threats will thus have to occur simultaneously with the sort of wrenching transitions advocated by the authors of *Holding the Line*, making the innovations this paper suggests even more difficult to achieve. The domestic environment is nearly as important as is the international one in the process of organizational change envisioned by this paper.

In “Buying ‘From the Sea . . . ’,” Owen Cote suggests that the major theater wars of the future are likely to occur along the world’s littorals and that future American access to ports and airfields is likely to diminish, necessitating more emphasis on the Navy’s ability to operate without fixed bases overseas. He argues that the Navy does not need more ships to accomplish these missions, but should instead use existing SSBNs to carry conventional guided missiles. Cote frees up Defense dollars for the conversion by canceling the F-22, Comanche, and Crusader, and by eliminating the 82nd Airborne Division, the 101st Air Assault Division, XVIIIth Airborne Corps Headquarters, and all eight Army National Guard Divisions, as well as two active and one National Guard F-16 wings. He also converts the 10th Mountain and 25th Infantry into Interim Brigade Combat Teams, arguing that “light Army divisions, and the airborne and air assault divisions in particular, make no sense in either the near or the longer term security environment.”²⁷

Karl Mueller’s “Flexible Power Projection for a Dynamic World: Exploiting the Potential of Air Power” continues the assault on Army force structure. Mueller, who notes that his views “do not reflect the views of the U.S. Air Force, the Department of

Defense, or the U.S. Government. At least not yet,” argues that “the technological changes of the late twentieth century, together with the strategic conditions of the early twenty-first, provide the opportunity to use the increased potential of land-based air power to provide some of the capabilities for which the United States has traditionally relied on land and naval forces.”²⁸ He suggests the elimination of two active heavy divisions and the reduction of each of the National Guard’s eight divisions to an independent brigade, the elimination of two brigades of the 82nd and one brigade of the 101st, and the transformation of the two remaining light divisions into Interim Brigade Combat Teams. Mueller’s underlying philosophy is that “for the scenarios that are plausible in the coming decade, the total combat capability of the U.S. Army is less important than is the amount of capability that can be deployed reasonably quickly.”²⁹

RAND’s James Quinlivan is given the task of defending the Army’s honor in the face of this onslaught--according to several of the chapter authors, the hardest argument to support of the three. In “Flexible Ground Forces,” he stands down one active heavy division and six National Guard divisions, creates seven Interim Brigade Combat Teams from four active brigades and from three National Guard Enhanced Separate Brigades (ESB), and retains the Army’s current four light divisions while converting three heavy National Guard ESB’s to armored carrier units built from mechanized infantry battalions to provide more survivability, lethality, and firepower to these light forces. Quinlivan preserves the Comanche while eliminating the Crusader (something that all of the authors agree on), and saves more DoD dollars by eliminating two aircraft carriers. Importantly for the Army, Quinlivan’s argument is based largely upon the assumption that the United States will continue to engage in smaller-scale contingencies with “boots on the ground.”

These missions, which the Army accepts unenthusiastically, are the only hope the Army's advocate can find for preserving Army force structure in the world of the twenty-first century.

Cindy Williams concludes *Holding the Line* by summarizing the conclusions of the chapter authors. Agreeing that the current two major theater war strategy "is not producing the capabilities needed for the challenges that the military faces today and will face increasingly in the future," she concludes that the two-MTW strategy no longer makes sense.³⁰ Instead, in her view the United States should increase its readiness for smaller-scale contingencies while assigning a lower priority to preparing for the second MTW, hold defense spending constant in real dollars for the next decade, cut more infrastructure, and reduce and reshape conventional force structure by cutting a number of National Guard and active duty Army divisions, eliminating at least one aircraft carrier, and removing at least two Air Force wings. Purchases of the Crusader and Comanche, the F-22, the Joint Strike Fighter and the F/A-18E should be severely reduced or cut entirely.

This author does not have to agree with all of the above force structure recommendations to be convinced that presenting them here is useful to the Department of Defense as it approaches what may and perhaps should be the most dramatic change in national security policy since the National Security Act of 1947. The threat has changed, and the United States must become serious about adapting to the new realities it faces.

Relationship to Previous Studies

This thesis stands on the shoulders of many previous works, including a substantial body of international relations theory, the US Army Training and Doctrine

Command's *Future Operational and Threat Environment*, the Joint Staff's work examining alternative futures, the three reports of the US Commission on National Security/21st Century, the National Intelligence Council's *Global Trends 2015*, and the *Report of the National Defense University Quadrennial Defense Review 2001 Working Group*. Its individual chapters are largely derivative of these previous works.

The thesis does make at least three original contributions. The first is through the application of the “ends, ways, and means” approach to the definition and analysis of the concept of asymmetric threats--an approach not used elsewhere, including in Steve Metz and Douglas Johnson's *Asymmetry and U.S. Military Strategy: Definition, Background, and Strategic Concepts*,³¹ the most recent attempt to get a handle on this frustratingly evasive phenomenon. The second is through its emphasis on non-rational ends of some state and non-state actors, who may attempt to hurt the United States merely to express their resentment of its position as the lone superpower and as the primary source and driver of globalization. No other study that this author has found has similarly analyzed future threats based on this end. Finally, this study is unique because of its methodical methodology--first describing the world of 2010, then analyzing the threats to the United States that will be present in that future world, and finally in describing the steps the United States should take to increase its security against asymmetric threats in that world. While the thesis uses the conclusions of previous studies to walk this crosswalk, no previous studies of future asymmetric threats have relied upon this rigorous methodology. This suggests a utility for this study beyond the walls of the US Army Command & General Staff College.

Suggestions for Further Research

Because of the “ends, ways, and means” approach to defining asymmetric threats used in this study, because of its focus on the motivations that may drive state and nonstate actors to do harm to the United States, and because of the methodology used in determining the nature of future threats to US national security in the world of 2010, this study presents a useful jumping-off point for future research into the questions it examines.

There are a number of questions dealt with in this study that are well worth exploring in more depth. The first is verifying the predictions of the democratic peace theory regarding the future of conflict within the First Tier of states, within the Second Tier, and between the first and the second tier, predictions on which the validity of the conclusions concerning the nature of the world in 2010 are largely drawn. Another is a deeper inquiry into the motivations of sub-state actors with a desire to injure the United States and its citizens; the ongoing trial of associates of Osama bin Laden in New York is daily providing additional insights into that question, and thus more answers to the problem of how to deal with such motivations. It would also be interesting to delve more deeply into the access of both state and non-state actors to the various asymmetric means of attack upon the United States. Finally, there is real potential for the “ends, ways, and means” paradigm of symmetry and asymmetry to be of further use to the Department of Defense as it struggles with this problem. Beginning with the ends sought by potential adversaries is a technique that appears to offer a great degree of promise for predicting--and thus hopefully preventing--future attacks upon the United States and its interests.

Conclusion

More than two hundred years ago, James Madison recognized that “The means of security can only be regulated by the means and the danger of attack. They will in fact be ever determined by those rules and by no others.”³² Today, America’s means of security are being regulated by a remembered threat, and not by the one she is likely to face for the next decade. This paper is submitted in the hope that it will prompt consideration of “the means and the danger of attack” that are likely to strike the United States and spur debate on the best ways to prevent those threats from becoming more dangerous, to deter them from causing America harm, and to respond to them when they arise in spite of the national security establishment’s best efforts.

33

¹Earl H. Tilford Jr., ed., *National Defense into the 21st Century: Defining the Issues* (Carlisle, PA: US Army War College Strategic Studies Institute, 6 June 1997), 5.

²*Ibid.*, 18.

³Richard A. Lacquement, Jr., *Preaching After the Devil’s Death: Shaping American Military Capabilities in the Post-Cold War Era* (Princeton, NJ: Princeton University Ph.D Dissertation, 2000).

⁴In addition to Lacquement’s dissertation, see John A. Nagl, “Ready for What?” *Joint Force Quarterly* (Summer 2000), 8-9.

⁵Key to this debate were Barry R. Posen, *The Sources of Military Doctrine: France, Britain, and Germany between the World Wars* (Ithaca, NY: Cornell University Press, 1984) and Stephen P. Rosen, *Winning the Next War: Innovation and the Modern Military* (Ithaca: Cornell, 1991).

⁶John A. Nagl, “Learning to Eat Soup with a Knife: British and American Army Counterinsurgency Learning during the Malayan Emergency and the Vietnam War”, *World Affairs* 161, no. 4 (Spring 1999): 193-199.

⁷“In the Indian Wars, the Civil War, and then climactically in World War II, American strategists sought in actuality the object that Clausewitz saw as that of the ideal type of war”: the destruction of the enemy’s armed forces in battle. Russell F. Weigley,

The American Way of War: A History of United States Military Strategy and Policy (Bloomington, IN: Indiana University Press, 1973), xxii.

⁸Jim Wirtz, Naval Postgraduate School, at INSS Conference, 28 July 1999.

⁹This assumes that America's political leadership is able to forge a national consensus on the proper role of the United States in the post-Cold War world. Earl H. Tilford Jr., ed., *National Defense into the 21st Century: Defining the Issues* (Carlisle, PA: US Army War College Strategic Studies Institute, 6 June 1997), 3.

¹⁰www.ctr.osd.mil; Internet.

¹¹*Preventive Defense*, 91.

¹²"Kerrey Offers Amendment to Reduce Nuclear Threats to U.S.," 28 July 1999 Press Release available at www.senate.gov/~kerrey/news/press/nukes.html; Internet. See also "Toward a New Nuclear Policy: Reducing the Threat to American Lives", Prepared Text of a Speech to the Council on Foreign Relations, 17 November 1998, available from www.senate.gov/~kerrey/ints/nukes/cfrspeak.html; Internet.

¹³*Preventive Defense*, 160-162.

¹⁴Eric Schmitt, "Panel Urges Plan to Curb Proliferation of Weapons," *The New York Times*, 9 July 1999, A13.

¹⁵Ashton B. Carter, "Keeping America's Military Edge," *Foreign Affairs* 80, no. 1 (January-February 2001), 95.

¹⁶Richard A. Falkenrath, "Problems of Preparedness: U.S. Readiness for a Domestic Terrorist Attack," *International Security* 24, no. 4 (Spring 2001), 147-186.

¹⁷Ambassador Joseph Roberts, NDU, 28 July 1999. See John A. Nagl, "Defending Against New Dangers: Arms Control of Weapons of Mass Destruction in a Globalized World," *World Affairs* 162, no. 4 (Spring 2000): 158-173.

¹⁸Jonathan Schell, "The Folly of Arms Control," *Foreign Affairs* 79, no. 5 (September-October 2000).

¹⁹Cited in Earl H. Tilford Jr., ed., *National Defense into the 21st Century: Defining the Issues* (Carlisle, PA: US Army War College Strategic Studies Institute, 6 June 1997), 50.

²⁰United States Marine Corps, *Small Wars Manual 1940* (Manhattan, Kansas: Sunflower University Press, No Date), 18.

²¹Robert D. Kaplan Lecture to the School of Advanced Military Studies, Fort Leavenworth, Kansas, 11 December 2000. See also his *Eastward to Tartary: Travels in the Balkans, the Middle East, and the Caucasus* (New York: Random House, 2000).

²²National Defense Panel, *Transforming Defense: National Security in the 21st Century* (Arlington, VA: National Defense Panel, 1997), accessed at <http://www.fas.org/man/docs/ndp/front.htm>

²³Michael O'Hanlon, "Rethinking Two War Strategies," *Joint Force Quarterly* 24 (Spring 2000), 11.

²⁴Don Snider, "Let the Debate Begin: It's Time For An Army Constabulary Force," *Army* (June 1998), 14-16.

²⁵Cindy Williams, ed., *Holding the Line: U.S. Defense Alternatives for the Early 21st Century* (Boston: MIT Press, 2001), 8.

²⁶An expanded version of this argument will appear in *Military Review* in Summer 2001 under the title "*Holding the Line* in the Post-Cold War World" as a Review Essay on the National Intelligence Council's *Global Trends 2015* and on *Holding the Line*.

²⁷Owen Cote, "Buying 'From the Sea . . .'," in Cindy Williams, ed., *Holding the Line: U.S. Defense Alternatives for the Early 21st Century* (Boston: MIT Press, 2001), 171.

²⁸Karl Mueller, "Flexible Power Projection for a Dynamic World," in Cindy Williams, ed., *Holding the Line: U.S. Defense Alternatives for the Early 21st Century* (Boston: MIT Press, 2001), 211.

²⁹*Ibid.*, 227.

³⁰Cindy Williams, "Conclusion and Recommendations," in Cindy Williams, ed., *Holding the Line: U.S. Defense Alternatives for the Early 21st Century* (Boston: MIT Press, 2001), 256.

³¹Steve Metz and Douglas Johnson, *Asymmetry and U.S. Military Strategy: Definition, Background, and Strategic Concepts* (Carlisle, PA: US Army War College Strategic Studies Institute, 2001).

³²*The Federalist* 41. Cited in Harry G. Summers Jr., "The Absence of a Defining Soviet Threat: The Effect on Conventional Force Structure," in U.S. General Accounting Office, *National Security: Perspective on the Worldwide Threats and Implications for US Forces* (Washington: U.S. General Accounting Office, April 1992).

³³

BIBLIOGRAPHY

Books

- Alibek, Ken, with Stephen Handelman. *Biohazard*. New York: Delta Press, 1999.
- Asprey, Robert B. *War in the Shadows: The Guerrilla in History*. New York: William Morrow, 1994.
- Bowden, Mark. *Blackhawk Down: A Story of Modern War*. New York: Atlantic Monthly Press, 1999.
- Brown, Michael, Sean Lynne-Jones, and Steven Miller, Editors. *Debating the Democratic Peace*. Boston: MIT University Press, 1996.
- Carter, Ashton B. and William J. Perry, *Preventive Defense: A New Security Strategy for America*. Washington, D.C.: Brookings Institution Press, 1999.
- Chandler, Robert W. *The New Face of War: Weapons of Mass Destruction and the Revitalization of America's Transoceanic Military Strategy*. McLean, VA: Amcoda Press, 1998.
- Corr, Edwin G. and Stephen Sloan, eds. *Low-Intensity Conflict: Old Threats in a New World*. Boulder, CO: Westview Press, 1992.
- Diamond, Jared. *Guns, Germs, and Steel: The Fates of Human Societies*. New York: W.W. Norton, 1998.
- Friedman, Thomas. *The Lexus and the Olive Tree: Understanding Globalization*. . New York: Farrar, Straus, Giroux, 1999.
- Fukayama, Francis. *The End of History and the Last Man*. New York: The Free Press, 1992.
- _____ and Abram N. Shulsky. *The "Virtual Corporation" and Army Organization*. Santa Monica, CA: RAND, 1997.
- Kaplan, Robert. *Balkan Ghosts: A Journey Through History*. New York: St. Martin's Press, 1993.
- _____. *Eastward to Tartary: Travels in the Balkans, the Middle East, and the Caucasus*. New York: Random House, 2000.
- _____. *The Ends of the Earth: A Journey to the Frontiers of Anarchy*. New

- York: Vintage Books, 1996.
- Karnow, Stanley. *Vietnam: A History*. New York: The Viking Press, 1983.
- Karsten, Peter, Peter D. Howell, and Artis Frances Allen. *Military Threats: A Systematic Historical Analysis of the Determinants of Success*. Westport, CT: Greenwood Press, 1984.
- Khalilzad, Zalmay and Ian O. Lesser, Eds. *Sources of Conflict in the 21st Century: Regional Futures and U.S. Strategy*. Washington, DC: RAND Corp., 1998.
- Knorr, Klaus, Ed. *Power, Strategy, and Security*. Princeton, N.J.: Princeton University Press, 1983.
- Krass, Allan S. *The United States and Arms Control: The Challenge of Leadership*. Westport, CT: Greenwood Press, 1997.
- Matthews, Lloyd J., Ed. *Challenging the United States Symmetrically and Asymmetrically: Can America be Defeated?* Carlisle Barracks, PA: U.S. Army War College Strategic Studies Institute, 1998.
- Mazarr, Michael J. *Global Trends 2005: The Challenge of a New Millennium*. Washington: CSIS, 1997.
- McRae, Hamish. *The World in 2020: Power, Culture, and Prosperity*. Boston: Harvard Business School Press, 1994.
- Moore, Gary W. *Developing and Evaluating Educational Research*. Boston: Little, Brown and Company, 1983.
- Nair, V. K. *War in the Gulf: Lessons for the Third World*. New Delhi: Lancer International, 1991.
- Pascall, Rod. *LIC 2010: Special Operations and Unconventional Warfare in the Next Century*. Washington, D.C.: Brassey's, 1990.
- Smith, James M., Ed. *Searching for National Security in an NBC World*. Colorado Springs, CO: INSS Press, 2000.
- Snider, Don M., John A. Nagl, and Tony Pfaff. *Army Professionalism, the Military Ethic, and Officership in the 21st Century*. Carlisle Barracks, PA: U.S. Army War College Strategic Studies Institute, 1999.
- Snow, Donald M. *The Shape of the Future: The Post-Cold War World*. New York: M.E. Sharpe, 1995.
- Tilford, Earl H. *National Defense into the 21st Century: Defining the Issues*. Carlisle

- Barracks, PA: U.S. Army War College Strategic Studies Institute, 1997.
- Valki, Laszlo, Ed. *Changing Threat Perceptions and Military Doctrines*. New York: St. Martin's Press, 1992.
- Vickers, Michael G. *Warfare in 2020: A Primer*. Washington, D.C.: Center for Strategic and Budgetary Assessments, 1996.
- Walt, Lewis W. *Strange War, Strange Strategy*. New York: Funk & Wagnall's, 1970.
- Waltz, Kenneth. *Theory of International Politics*. New York: McGraw-Hill, 1979.
- Weigley, Russell F. *The American Way of War: A History of United States Military Strategy and Policy*. Bloomington, IN: Indiana University Press, 1973.
- Williams, Cindy, ed. *Holding the Line: U.S. Defense Alternatives for the Early 21st Century*. (Boston: MIT Press, 2001).

Periodicals and Articles

- Boot, Max. "Will Bush Bury Bodybag Syndrome?" *The Wall Street Journal*, 11 September 2000, A1.
- Carter, Ashton, John Deutch, and Philip Zelikow, "Catastrophic Terrorism: Tackling the New Danger." *Foreign Affairs* 77, no. 6 (November/December 1998), 80-94.
- Crossette, Barbara. "Out of Control: The Internet Changes Dictatorship's Rules." *The New York Times Week in Review* (1 August 1999), 1, 16.
- Dickey, Christopher and Carla Power, "A Spreading Islamic Fire." *Newsweek* (19 February 2001), 36-37.
- Eickelman, Dale F. "The Coming Transformation of the Muslim World." Foreign Policy Research Institute *WIRE* 7, no. 9, (August 1999), 1-13.
- Falkenrath, Richard A. "Problems of Preparedness: U.S. Readiness for a Domestic Terrorist Attack." *International Security* 25, no. 4 (Spring 2001), 147-186.
- Garrett, Laurie. "The Nightmare of Bioterrorism." *Foreign Affairs* 80, no. 1 (January/February 2001), 76-89.
- Kotler, Jared. "Guerrillas To Study Curbing The Use Of Terrifying Homemade Missiles." *Fort Worth Star-Telegram* (13 February 2001), A13.
- Krepinevich, Andrew F. "Why No Transformation?" *Joint Force Quarterly*

- 23 (Autumn/Winter 1999-2000), 97-101.
- Nagl, John A. "Defending Against New Dangers: Arms Control of Weapons of Mass Destruction in a Globalized World." *World Affairs* 162, no. 4 (Spring 2000), 158-173.
- _____. "Learning to Eat Soup with a Knife: British and American Army Counterinsurgency Learning during the Malayan Emergency and the Vietnam War." *World Affairs* 161, no. 4 (Spring 1999), 193-199.
- _____. "Ready for What?" *Joint Force Quarterly* 25 (Summer 2000), 8-9.
- O'Hanlon, Michael. "Rethinking Two War Strategies." *Joint Force Quarterly* 24 (Spring 2000), 11-15.
- Peters, Ralph. "Fighting for the Future." *The Washington Post* (7 March 1999), B01.
- Priest, Dana. "An Engagement In 10 Time Zones." *The Washington Post* (29 September 2000), A1.
- Rattray, Greg. "The Emerging Global Information Infrastructure and National Security." *The Fletcher Forum of World Affairs* 21, no. 2 (Summer/Fall 1997), 45-53.
- Schell, Jonathan. "The Folly of Arms Control." *Foreign Affairs* 79, no. 5 (September/October 2000), 22-46.
- Smith, Paul J. "Transnational Security Threats and State Survival: A Role for the Military?" *Parameters* 30, no. 3 (Autumn 2000), 77-91.
- Snider, Don. "Let the Debate Begin: It's Time For An Army Constabulary Force." *Army* (June 1998), 14-16.
- Stencel, Sandra, ed. "Defense Priorities: Is the U.S. prepared for the post-Cold War Era?" *CQ Researcher* 9, no. 28 (30 July 1999), 641-664.
- Zakaria, Fareed. "Is This the End of Inflation?" *Newsweek* (19 March 2001), 39.

Government Documents

- Clinton, William Jefferson. *A National Security Strategy for a Global Age*. Washington, D.C.: The White House, December 2000.
- Cohen, William. *Proliferation: Threat and Response*. Washington, D.C.: Office of the

Secretary of Defense, November 1997.

Deutsch, John, Ed. Report of the Commission to Assess the Organization of the Federal Government to Combat the Proliferation of Weapons of Mass Destruction (“The Deutch Commission”), available at www.senate.gov/~specter/11910book.pdf

Flournoy, Michele A. *Report of the National Defense University Quadrennial Defense Review 2001 Working Group*. Washington, D.C.: Institute for National Security Studies, 2000.

Institute for National Security Studies. *1998 Strategic Assessment: Engaging Power for Peace*. Washington, D.C.: National Defense University Press, 1998.

National Intelligence Council, *Global Trends 2015: A Dialogue About the Future with Nongovernmental Experts*. Washington, D.C.: Government Printing Office, 2001.

Perry, William. *Department of Defense Report To The President on Khobar Towers Bombing* (Washington, DC: September 1996), available at www.pollux.com/defenseweb/1996/sept96/khobar.htm

U.S. Army Training and Doctrine Command. *Future Operational and Threat Environment: A View of the World in 2015*. FT Monroe, Virginia: U.S. Army Training and Doctrine Command, 12 April 2000.

United States Commission on National Security. *New World Coming: American Security in the 21st Century*. Washington, DC : United States Commission on National Security, 1999.

Unpublished Materials

Cleaves, Jon S. “In Search of an Enduring Military Theory: Examining the U.S. Army’s Principles of War.” Ft. Leavenworth, KS: U.S. Army Command and General Staff College MMAS thesis, 1997.

Cottrell, Scott C. “Identifying the Roles of the Separate Governmental Agencies in Countering the Proliferation of Weapons of Mass Destruction among Nonstate Actors throughout the Counterproliferation Continuum.” Ft. Leavenworth, KS: U.S. Army Command and General Staff College MMAS thesis, 1997.

Nagl, John A. “Learning to Eat Soup with a Knife: British and American Army Counterinsurgency Learning during the Malayan Emergency and the Vietnam War.” Oxford, England: Oxford University Doctoral Dissertation, 1997.

INITIAL DISTRIBUTION LIST

1. Combined Arms Research Library
U. S. Army Command and General Staff College
250 Gibbon Avenue
Fort Leavenworth, KS 66027-6900
2. Defense Technical Information Center/OCA
8725 John J. Kingman Road, Suite 944
Fort Belvoir, VA 22060-6218
3. Mr. Bob Walz
DJMO, USACGSC
1 Reynolds Avenue
Fort Leavenworth, KS 66027-6900
4. Dr. Roger Spiller
Marshall Chair, USACGSC
1 Reynolds Avenue
Fort Leavenworth, KS 66027-6900
5. LTC Jon Cleaves
Threat Directorate, TRADOC
Fort Leavenworth, KS 66027-6900

CERTIFICATION FOR MMAS DISTRIBUTION STATEMENT

1. Certification Date: 1 June 2001
2. Thesis Author: Major John A. Nagl
3. Thesis Title: Asymmetric Threats to U.S. National Security to the Year 2010
4. Thesis Committee Members _____
Signatures: _____

5. Distribution Statement: See distribution statements A-X on reverse, then circle appropriate distribution statement letter code below:

(A) B C D E F X
 REVERSE

SEE EXPLANATION OF CODES ON

If your thesis does not fit into any of the above categories or is classified, you must coordinate with the classified section at CARL.

6. Justification: Justification is required for any distribution other than described in Distribution Statement A. All or part of a thesis may justify distribution limitation. See limitation justification statements 1-10 on reverse, then list, below, the statement(s) that applies (apply) to your thesis and corresponding chapters/sections and pages. Follow sample format shown below:

EXAMPLE

<u>Limitation Justification Statement</u>	<u>/</u>	<u>Chapter/Section</u>	<u>/</u>	<u>Page(s)</u>
<u>Direct Military Support (10)</u>	<u>/</u>	<u>Chapter 3</u>	<u>/</u>	<u>12</u>
<u>Critical Technology (3)</u>	<u>/</u>	<u>Section 4</u>	<u>/</u>	<u>31</u>
<u>Administrative Operational Use (7)</u>	<u>/</u>	<u>Chapter 2</u>	<u>/</u>	<u>13-32</u>

Fill in limitation justification for your thesis below:

<u>Limitation Justification Statement</u>	<u>/</u>	<u>Chapter/Section</u>	<u>/</u>	<u>Page(s)</u>
_____	<u>/</u>	_____	<u>/</u>	_____
_____	<u>/</u>	_____	<u>/</u>	_____
_____	<u>/</u>	_____	<u>/</u>	_____

7. MMAS Thesis Author's Signature: _____

STATEMENT A: Approved for public release; distribution is unlimited. (Documents with this statement may be made available or sold to the general public and foreign nationals).

STATEMENT B: Distribution authorized to U.S. Government agencies only (insert reason and date ON REVERSE OF THIS FORM). Currently used reasons for imposing this statement include the following:

1. Foreign Government Information. Protection of foreign information.
2. Proprietary Information. Protection of proprietary information not owned by the U.S. Government.
3. Critical Technology. Protection and control of critical technology including technical data with potential military application.
4. Test and Evaluation. Protection of test and evaluation of commercial production or military hardware.
5. Contractor Performance Evaluation. Protection of information involving contractor performance evaluation.
6. Premature Dissemination. Protection of information involving systems or hardware from premature dissemination.
7. Administrative/Operational Use. Protection of information restricted to official use or for administrative or operational purposes.
8. Software Documentation. Protection of software documentation - release only in accordance with the provisions of DoD Instruction 7930.2.
9. Specific Authority. Protection of information required by a specific authority.
10. Direct Military Support. To protect export-controlled technical data of such military significance that release for purposes other than direct support of DoD-approved activities may jeopardize a U.S. military advantage.

STATEMENT C: Distribution authorized to U.S. Government agencies and their contractors: (REASON AND DATE). Currently most used reasons are 1, 3, 7, 8, and 9 above.

STATEMENT D: Distribution authorized to DoD and U.S. DoD contractors only; (REASON AND DATE). Currently most reasons are 1, 3, 7, 8, and 9 above.

STATEMENT E: Distribution authorized to DoD only; (REASON AND DATE). Currently most used reasons are 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10.

STATEMENT F: Further dissemination only as directed by (controlling DoD office and date), or higher DoD authority. Used when the DoD originator determines that information is subject to special dissemination limitation specified by paragraph 4-505, DoD 5200.1-R.

STATEMENT X: Distribution authorized to U.S. Government agencies and private individuals of enterprises eligible to obtain export-controlled technical data in accordance with DoD Directive 5230.25; (date). Controlling DoD office is (insert).